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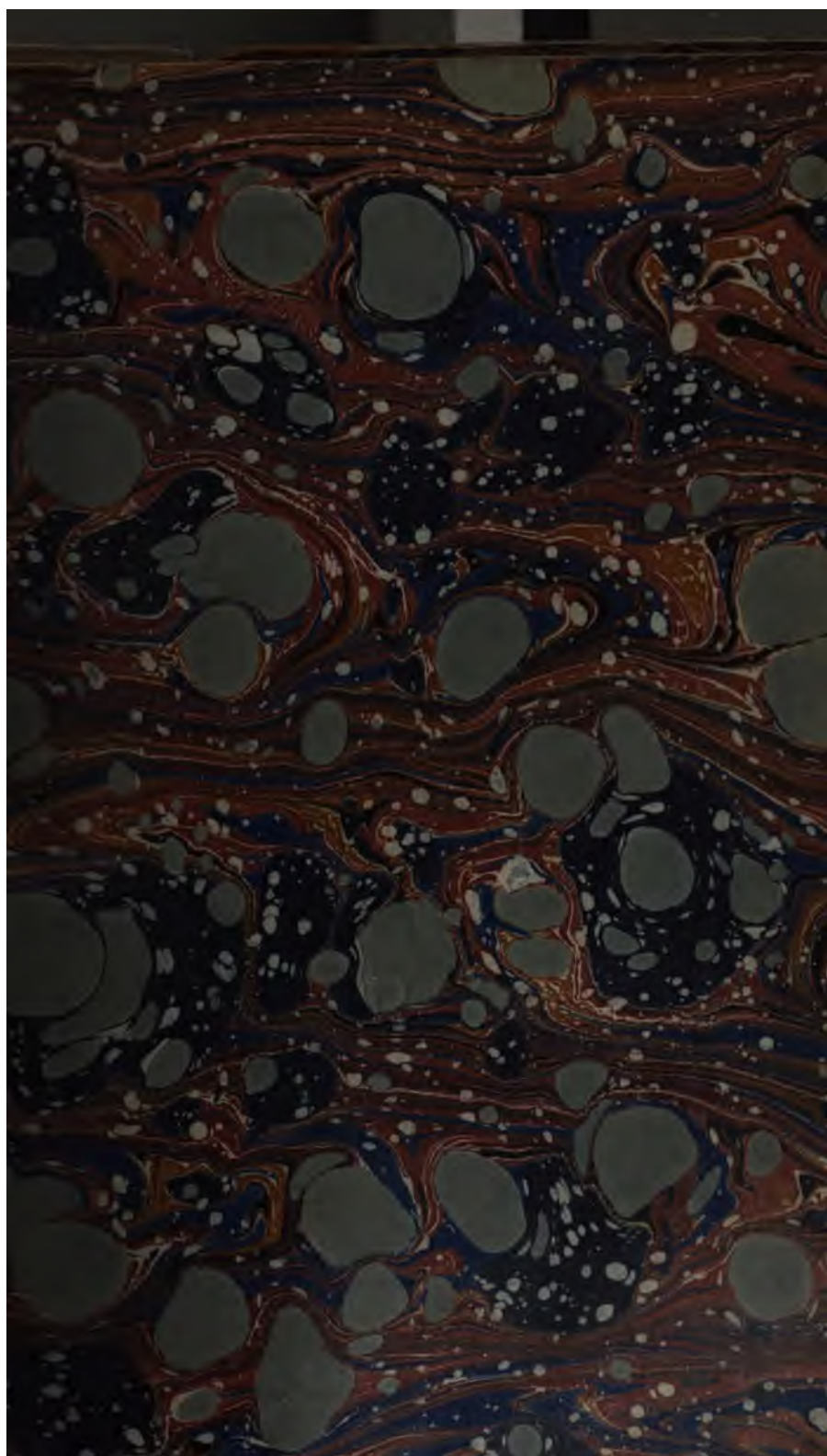
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# HISTORY OF PHILOSOPHY.

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## BOOK IX.

THIRD PERIOD. PHILOSOPHY OF THE SOCRATIC SCHOOLS.

### PART III.

ARISTOTLE AND THE EARLIER PERIPATETICS.

#### CHAPTER I.

LIFE AND WRITINGS OF ARISTOTLE.

ARISTOTLE, according to Apollodorus, was born Ol. 99, 1, at Stagira, a Greek colony in Thrace.<sup>1</sup> His father Nicomachus, who is said to have left behind him many works on medicine and natural history,<sup>2</sup> was the physician and friend of Amyntas, king of Macedonia, and traced his descent up to Æsculapius.<sup>3</sup> This circumstance deserves mention, as in all probability it determined the particular direction which the scientific pursuits of Aristotle took, and as it indicates the long and hereditary devotion of his family to medical and physical sciences. Aristotle at a very early age lost both

<sup>1</sup> The most consistent and probable chronology of the life of Aristotle is found in Diog. Laert. v. 9, 10. Compare Stahr *Aristotelia* 1<sup>er</sup> Theil, Halle, 1830, § 29, etc.

<sup>2</sup> Suidas, s. v. *Νικόμαχος*.

<sup>3</sup> Pseudo-Ammonii v. Arist.; Diog. Laert. v. 1.

his parents, and the charge of his education was undertaken by one Proxenus of Atarneus, who had him carefully instructed in the different branches of physical science, and Aristotle gratefully acknowledged throughout life his obligations to the family of Proxenus. There is a story current which speaks of Aristotle as passing his youth in riot and waste, whereby his paternal inheritance was dissipated; that in consequence he adopted the profession of arms, in which his career was neither fortunate nor honourable, and that ultimately he was fain to set up as a retailer of drugs<sup>4</sup>. This statement, however, ill agrees with another, better warranted, which makes him join Plato at Athens in his seventeenth year with the design of studying philosophy.<sup>5</sup> Here he continued for a space of twenty years, all of which time assuredly he did not devote to the instructions of Plato; on the contrary, we must assign to this period the preparatory labours of the great works of his after life. The zeal with which Aristotle strove to master

<sup>4</sup> Ælian, Var. Hist. v. 9. The story rests on the authority of Epicurus, an ancient, but certainly not impartial witness; Athen. viii. 354. We shall not here recount all the objections which have been made against the moral character of Aristotle, but shall only mention that it is said to have been vilified by his disciple Aristoxenus, by Epicurus and Timæus, and by the author of the work *περί παλαιῆς τρυφῆς*, and by the Megarian Alexinos and others. See Euseb. *Præp. Evan.* xv. 2.

<sup>5</sup> According to the chronological statements of Apollodorus, Diog. Laert. v. 9. The account in the biography of Aristotle, falsely ascribed to Ammonius, proceeds on such a calculation, only that Socrates stands there in the place of Plato. Dionysius Halicarnassus Ep. ad Ammæum, c. 5. gives the eighteenth year. In other respects the accounts of Dionysius are drawn from the same sources as those of Diogenes. Stahr, *ut sup.* notices that, according to this account, Aristotle arrived at Athens in the year assigned by Corsini to Plato's second voyage to Syracuse; but the departure of Plato might have taken place subsequently to Aristotle's arrival.



the treasures not only of the olden philosophy but of the whole literature of Greece may be inferred from the name of 'The Reader' which Plato gave to him,<sup>6</sup> as well as from the words of Plato, who, upon comparing him to Xenocrates, said, that the latter required the spur, the former the bit.<sup>7</sup> When we consider the extent of information which Aristotle possessed in every branch of natural science, it is only reasonable to suppose that even at this period of his Platonic pupilage he investigated nature more diligently and more minutely than was consistent with the character of his teacher. It is not improbable that at the same time he applied himself to the study of medicine, both because works on that science have been attributed to him, and because many of his extant writings betoken no slight acquaintance with that department of knowledge. However, the supposition of later authors that he practised medicine at Athens, rests apparently on very uncertain grounds.<sup>8</sup>

As to the terms on which he stood with Plato, accounts differ widely. While Plato's words, already quoted, appear to imply anything but an

<sup>6</sup> Ammon. v. Arist. In the old Latin version there is an addition: "Et ipso (Aristotle) abeunte a lectione clamabat (Plato): intellectus abest; surdum est auditorium; cf. Nunnesii not. ad h. l." But this, and many similar, reveals the exaggeration of later times.

<sup>7</sup> Diog. Laert. iv. 6.

<sup>8</sup> Franc. Patricii *discussionum peripateticarum*, tom. iv. Bas. 1581, fol. p. 3. This assertion has been supported principally by the consideration that after having wasted his patrimony he was driven to the necessity of seeking a maintenance by the profession of medicine. The work above quoted has been only too often made use of in notices of the life and writings of Aristotle, for it affords little on which it is possible to rest with confidence. I make this remark in excuse to those who may think that I have not quoted this learned work frequently enough, or even paid attention to its statements.

unfavourable opinion, other statements can be produced to show that, at least in the last years of Plato's life, the earlier friendship between the master and disciple had given place to mutual misunderstanding, not to say hostility. And it is only right that the disciple should bear, if not the whole, at least the principal share of the blame. Aristotle is accused of ingratitude to Plato, who incurred his displeasure by preferring to him another disciple, less talented indeed, but a more faithful adherent to his own system. The charge is supported not merely by several anecdotes, but by an appeal to the writings of Aristotle himself, who takes every occasion to refute the theory of his master. If, indeed, we had only these anecdotes to look to, they alone, we confess, would deserve no more attention than do the similar statements which speak of Plato's ingratitude to Socrates. Plato, we are told, disliked Aristotle for his moral character and habits of life, for Aristotle, who was naturally of a disagreeable exterior,<sup>9</sup> sought to supply the deficiencies of nature by the aids of art, and by a pomp of style which could not be otherwise than displeasing to one of Plato's philosophical simplicity. Moreover, the caustic tone of Aristotle was far from agreeable to Plato, who on that account excluded him from his more intimate society. Aristotle, on the other hand, when Plato was old, and no longer enjoying the full vigour of his intellect, seized the opportunity of the absence of his most distinguished disciples to propound captious ques-

<sup>9</sup> Diog. Laert. v. 1. Vita Arist. ap. Menag. fin.

tions to his master, and thereby put a stop to Plato's usual walks in the Academy, who from this time cultivated philosophy with his immediate friends within the retirement of his own home, and abandoned the Academy to the presidency of Aristotle. On the return of Xenocrates, Aristotle was again expelled and Plato reinstated, who on this occasion is said to have compared his rebellious disciple to the foal that kicked its mother<sup>10</sup>. There are many circumstances which render this tale improbable. Without laying any stress on a conflicting story which makes Aristotle raise an altar in honour of Plato, with a laudatory inscription,<sup>11</sup> nor upon the entire silence of all Plato's biographers on the subject of the senile impotency of his closing years, which these anecdotes imply, it is certain that other statements know nothing of such a collision between Plato and his most distinguished disciple. For it is elsewhere asserted that the death of Plato was the occasion of Aristotle's leaving Athens;<sup>12</sup> and this same Xenocrates, by whom he is said to have been expelled

<sup>10</sup> Ælian, *Var. Hist.* iii. 19; iv. 9; *Diog. Laert.* v. 2; *Ammon.* v. *Arist.* According to the Latin version of this biography, Aristoxenus was the originator of this story; but it would seem that he did not give the name Aristotle. *Aristox. ap. Eusebius, Præp. Evan.* xv. 2. According to Ælian and Diogenes all the above particulars are connected together, and belong to one and the same story. But this renders the whole story suspicious, so soon as any one particular is proved to be improbable.

<sup>11</sup> *Ammon.* v. *Arist.*; cf. *Buhle ad h. l.* where a singular ground is urged why Aristotle could not open a school in Athens in the lifetime of Plato, because Chabrias and Timotheus, the most influential of the Athenians, were relations of Plato. Both were already deceased.

<sup>12</sup> *Apollod. ap. Diog. Laert.* v. 9; et *Dionysius Halicar.* ut *supra*.

from the Academy, is made the companion of his travels.<sup>13</sup> All that can be drawn from these conflicting statements is, that Aristotle, as one of the ablest and oldest disciples of Plato, had some authority over the opinions of his younger and less gifted fellows, even in the lifetime of Plato; a state of things which would not necessarily terminate the friendship of the two philosophers.<sup>14</sup>

On a full consideration of all the circumstances, we are constrained to admit, that Aristotle nowhere prominently exhibits the signal merit of Plato in the service of Philosophy. Indeed, that on the whole, he not obscurely evinces an extravagant estrangement from Plato and his school.<sup>15</sup> This, however, may be explained partly from the scope and design of Aristotle's works, and partly from his scientific character. The object of the former, was not so much to give a due estimate of every philosopher, as by the examination of the systems of all to prevent his own disciples being disheartened or perplexed by erroneous opinions, however widely and speciously diffused. The scientific character of Aristotle prevented him from reviewing the system of Plato in its spirit, for it cannot be denied that the Aristotelian criticism attaches itself by preference to single tenets, which it estimates

<sup>13</sup> Strabo xiii. 1. p. 126, etc.

<sup>14</sup> Thus, according to Strabo, Hermias heard at Athens both Plato and Aristotle. Stahr, p. 63, etc. supposes that at this time Aristotle taught rhetoric, and was a rival of Socrates, according to Cicero de Orat. iii. 35. The story however is very improbable, and the reading Xenocrates for Isocrates (Diog. Laert. v. 3) is in all likelihood correct.

<sup>15</sup> Eth. Nic. i. 4.

not so much by their philosophical import, and relation to the system to which they belong, as by the form of expression.<sup>16</sup>

But the ingratitude of Aristotle to his master may also, it is pretended, be traced in his works. Undoubtedly he often finds fault with Plato, and never mentions him except to refute his doctrines; but here the difficult question immediately arises, how far the demand of gratitude from a disciple to his teacher is justly to be carried? If Aristotle had reason for deviating from the doctrine of his master, no blame ought to attach to the objections which he may urge against it. Those indeed who labour to exculpate Aristotle from this charge of ingratitude usually insist on a passage in his works expressive of the regret which he feels at finding himself constrained to refute the opinions of his master, and fellow-learners, but that his only motive was the duty of giving honour to truth. Nevertheless, it cannot be denied that he at times evinces something of a bitterness in the zeal with which he attacks the system of Plato and the Platonists, and usually represents its tendency as fatal to science.

After the death of Plato, we are told, that Aristotle, accompanied by Xenocrates, betook himself to Hermeas, the philosophical tyrant of Atarneus, and

<sup>16</sup> We will give a few instances: Anal. Post. i. 19. *τὰ γὰρ εἶδη χαιρίτω περιείματα γὰρ ἔστι;* Met. iii. 2. Comparison of the ideal theory with the anthropological conceptions of the gods. Eth. Eud. i. 8. *λογικῶς καὶ κενῶς.* Anal. Post. ii. 18. *ἀτοκον.* De Gen. et Corrup. i. 2. *οἱ δ' ἐκ τῶν πολλῶν λόγων ἀθειώρητοι τῶν ὑπαρχόντων ὄντες πρὸς ὀλίγα ἐπιβλήσαντες ἀποφαίνονται ῥᾶον.*

Assos<sup>19</sup>. His acquaintance with the eunuch commenced at Athens, where Hermeas is represented to have listened to the lessons of Plato and Aristotle. Several circumstances hint at a great intimacy between them, which has afforded occasion to statements unfavourable to the character of Aristotle.<sup>20</sup> He spent three years with Hermeas, until the latter was carried off by violence, when he evinced his gratitude to the deceased by marrying his sister Pythias, who was left destitute.<sup>21</sup> By her he had issue a daughter, his son Nicomachus being by a favourite concubine, Herpyllis,<sup>22</sup> whom after the death of Pythias he made his wife.<sup>23</sup> From Atarneus, Aristotle fled with Xenocrates to Mitylene,<sup>24</sup> where he remained but a short while; for in the second year of the 109th Ol. he was called by Philip of Macedon to take the charge of the education of his son Alexander, then three years old. This union of an inquiring philosopher with an ambitious monarch was fortunate. Aristotle enjoyed Philip's favour in the highest degree, and obtained from him the restoration of his native town Stagira, which had been destroyed in the war, and a gymnasium was built there for his philosophical lectures.<sup>25</sup> Similar kindness was shown to him by

<sup>19</sup> Diog. Laert. v. 3; Strabo, ut supra.

<sup>20</sup> Aristotle has also been reproached with pederasty with several of his scholars. Athen. xiii. p. 566. c. note.

<sup>21</sup> Aristocl. ap. Eus. Præp. Evan. xv. 2. By Strabo, ut supra, she is called the niece of Hermeas.

<sup>22</sup> Diog. Laert. v. 1; Athen. p. 589.

<sup>23</sup> Suidas, s. v. 'Αριστοτ. Ammon v. Arist. There is some confusion here, for he received Herpyllis from the hands of Hermeas.

<sup>24</sup> Strabo, ut supra; Dionysius Halicar. ut supra; Diog. Laert. v. 9.

<sup>25</sup> Plutarch v. Alexander, vii; Ælian, Var. Hist. iii. 17; Diog. Laert. v. 4.

Alexander ~~after~~ his accession. But the statement that he accompanied the great conqueror in his Asiatic and Indian expedition is a pure fiction, for Aristotle ~~parted~~ from Alexander at the commencement of the Macedonian war, and opened his school at Athens;<sup>66</sup> leaving his scholar and kinsman, Callisthenes, to supply his place about the person of Alexander.<sup>67</sup>

At Athens, Aristotle taught in the Lyceum, the only gymnasium then vacant, for Theophrast had possession of the Academy, and the Cynics of the Cynosarges. In his lifetime, no other philosophical school was so well frequented, as may be inferred from the great number of eminent men who are usually reckoned as his disciples. From his custom of explaining his view of philosophy as he walked up and down with his disciples through the shady walks of the Lyceum, his school has received the title of Peripatetic. His instructions were not confined to philosophy, but comprised every branch of inquiry which could profit the youth of an enlightened age, and especially rhetoric.<sup>68</sup> His disciples are said to have been distinguished into two classes, one of which was exercised in the morning in the profoundest questions of philosophy, and the other, in the evening, in a more general and preparatory instruction. The former investigations were called acroatic or acroamatic, the latter exoterical. Naturally, the

The rebuilding of Stagira is attributed to Alexander also, *Ælian*, Var. Hist. xii. 54; *Ammon*. v. *Arist.* and others.

<sup>66</sup> *Diog. Laert.* v. 10; *Dionysius Halicar.* ut supra.

<sup>67</sup> *Diog. Laert.* ut supra.

<sup>68</sup> *1b.* v. 3; *Cic. de Orat.* iii. 35; *orat.* 14.

more approved and advanced scholars alone participated in the former.<sup>29</sup> In these pursuits Aristotle spent at Athens thirteen years, employed at the same time in the composition of the principal part of his written works.<sup>30</sup> To this period also, must be assigned his important labours in experimental knowledge, especially in the natural history of animals, wherein he was assisted by the magnanimous liberality of Alexander.<sup>31</sup> Subsequently, he appears to have fallen under the displeasure of his royal pupil and patron, in consequence of having expressed in rather free terms his disapprobation of the changed habits of the king.<sup>32</sup> The charge has even been brought against Aristotle that he furnished Antipater with the poison by which Alexander was taken off.<sup>33</sup> At the close of this period he returned to Chalcis, in order, it is pretended, to escape a fate similar to that of Socrates. The grounds on which he was accused of impiety are very singular. He had written a scolion and an epigram in praise of Hermeas, and this was wrested to support the accusation.<sup>34</sup> Soon after

<sup>29</sup> Gell. Noct. Att. xx. 5; cf. Diog. Laert. v. 2, 3.

<sup>30</sup> If the well known letter of Alexander to Aristotle, (Plut. v. Alex. 7. Gell. Noct. Att. xx. 5.) be genuine, all the acroatic works must be assigned to this period. There are, however, other grounds to make this probable.

<sup>31</sup> Plinii Hist. Nat. viii. 17; Athen. ix. p. 398.

<sup>32</sup> Diog. Laert. v. 10; Plut. v. Alex. 55.

<sup>33</sup> Plut. v. Alex. 77.

<sup>34</sup> Diog. Laert. v. 6; Athen. xv. p. 696. According to Athenæus, the poem is not a poem, as it is elsewhere called, but a scolion. As to the pretended grounds of the accusation, if not the charge itself, I feel my doubts. On a comparison of the political events of the period it will be seen, that this pretended accusation must have fallen in the time of the Lamian war, or very near it. All accounts agree in representing Aristotle as the friend of Antipater; consequently he could not have been condemned after that war. During the war, however, his friendship with Antipater might have afforded grounds of ob-



his flight from Athens, he died at Chalcis, having taken poison it is pretended, from fear of being pursued ; but according to a more trustworthy authority, by a natural death.<sup>35</sup>

As to the unfavourable reports of the character of Aristotle, we have already appreciated the greater part of them ; they by no means justify any imputation of low or dishonourable feelings. In his works, on the other hand, we see him the calm and sober inquirer, who does not, like Plato, pursue a lofty ideal, but keeps carefully in view the proximately practicable, and is not easily misled into any extravagance, either of language or of thought. His principal object is to examine truth under all her aspects, never to step beyond the probable, and to bring his philosophical system in unison with the general opinions of men, as supported and confirmed by common sense, observation, and experience. Not that he has invariably abstained from giving a too extensive validity to particular principles, but that generally a wise moderation characterizes his views of science and of life. The love of scientific pursuits was the predominant feature of his character. His estrangement from, and unfavourable estimate of political life, was perhaps in some way connected with the fact, that belonging only to a Greek colony he was only remotely interested in the more important political events of Greece, although indeed it is sufficiently

jection against him ; it is not very clear in that case why a different and far-fetched reason should have been sought for. Moreover, the statement that Aristotle was accused for doctrinal grounds is not at all well founded.

<sup>35</sup> Apollodor. ap. Diog. Laert. v. 10 ; Dion. Hal. ut supra.

explicable in itself, for, in the time of Aristotle, the political aspect of Greece presented little cause of hope to the calm observer. On this account his intimacy with tyrants and the oppressors of Grecian liberty must not be pressed against him so seriously as some of his opponents have done. Moreover, in Aristotle we have the cold inquirer, and little more. Rarely, if ever, does he step aside to consider the bond which connects the science of the universal and of nature, with the human intellect and will. Consequently his works have none of that impressiveness which constitutes the principal charm of Plato's writings. In the intimate contemplation of the soul's activity, he is neither so profound nor so natural as in the observation of the forms and shapes in which outward nature reveals herself. In whatever degree this neglect of all that moves and excites the mind may have contributed to the simplicity of his works and the rigour with which the intellectual view is carried out, they have suffered in warmth and earnestness of style. It is true we only possess a portion of his works, and the very portion which is designedly free from all accessory matter and embellishment. Nevertheless, the very manner in which this portion is treated, sufficiently proves that Aristotle, even if his mind were not totally alien from every poetical element, was unable to combine the sober results of science with a lively imagination. Hence his deficiency in large co-ordination of matter; hence it is that the transitions are most frequently furnished by controversial notices of those whose views are opposed to his

own; hence the necessity of his frequent repetitions; hence, notwithstanding the occasional purity and clearness of style, his ordinary exposition is rude, abrupt even in details, which renders it difficult to seize the connection of his ideas, and which seldom attains to perfect transparency of the thought. At times, the perusal of his works creates a suspicion that he had formed an aversion for, and intentionally avoided, every grace of style. Consequently, he is always serious, at times cutting, and even bitter, generally brief, although occasionally on unimportant topics he becomes diffuse, from an incapacity to seize his own meaning. With Aristotle, erudition has taken the place of art. He is the first philosopher in whom this is noticeable; and, assuredly, he contributed no little to establish that idea of the pre-eminence of mere learning which was entertained by the later writers of Greece. However valuable his practice in this respect may be to the historian of philosophy, for Aristotle may rightfully be called the father of this branch of history, we must nevertheless look upon it as the sign of incipient decay. For in the freshness of its youth the Greek mind loved art more than learning. Still we must not blame Aristotle as having introduced this new but vicious taste,—he but followed the tendency of his age. Besides, in his view of science, it was indispensable to bring under review the multiplicity of phenomena, both in nature and in the evolution of the reason, and for this purpose to collect them as widely and comprehensively as possible. It would be unjust to reproach Aristotle with his inability to give a lively

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interest to the whole mass of the materials which he thus collected, for they were too numerous for any individual singly to arrange and digest. The collection has always had its use though after ages alone may have profited by it; still it may be doubted whether Aristotle was capable of identifying himself with much which in his day still possessed a lively interest for the Greek. In our opinion, much, that in earlier times was a living impulse, was to him a dead and lifeless form. The remark which we formerly made, when we were considering the relation in which he stood to Plato, forcibly obtrudes itself when we examine his critical notices of the earlier philosophers.

Seldom entering into their spirit, for the most part he adheres to the mere form; and, betraying a singular dulness and inadequacy of conception, he attaches himself to the first intention of words and to isolated expressions, in cases where the poetical flight of the style ought to be understood figuratively, or where the sense ought to be determined by the character of the whole system. But this disposition to treat philosophy as simply a branch of learning, is most strikingly evinced by Aristotle's manner of appending his own disquisitions on the older philosophy to the doubts to which it gave rise, rather than of interweaving the disquisitions with the doubts. The consequence is, that the course of his inquiry is frequently broken, and evinces less of independent thought than the intrinsic evolution of his own philosophical system allowed. Besides, his erudition frequently injures the accuracy of his style; for

his endeavour to give a settled terminology to his philosophy, is greatly impeded by his learned acquaintance with the terminology of others, and especially the Platonic, which occasionally he, as it were, habitually but involuntarily adopts. The doubts which arose from this consideration of the earlier systems, often gives a vagueness and indecision to his own exposition, which assumes at times the form of a sceptical examination, or of an ambiguous conclusion. Such results, however, agree well with the tempered moderation of Aristotle; according to whom, a modest restraint and deference is more suitable to philosophy, than the rash confidence of an inordinate and presumptuous curiosity.<sup>36</sup> Nevertheless, Aristotle was far from being content with merely ambiguous results; he often draws conclusions more rigorous and decisive than Socrates or Plato; and even in those domains of speculation which are absolutely removed from human observation, he was able to express himself with a precision far removed from the vague mysticism of Plato. The positive conclusions of Aristotle are so couched, that it would be impossible to give any other turn to them; and are moreover founded on his view of philosophy, which with him is not, as with Plato, an aspiration and a passion, but a theory. There is on record a saying of this philosopher, which appears to have originated entirely in a feeling of this nature. He accuses the ancient philosophers, who boasted that they had given perfection to philosophy, of being either very narrow in their views, or else very vainglorious;

<sup>36</sup> De Cælo, ii. 12, in.

but at the same time he admitted that it had made great progress within a few years, and therefore hoped it would in a short period be completed.<sup>37</sup> We know it to be otherwise. And this is an allusion which we can suppose to exist only in the mind of an individual, who, assigning to philosophy too narrow a domain, looked more to the partial correctness of his own formulæ, than to the boundless compass of the human reason.

To Aristotle are attributed a considerable number of yet extant works, which however are far from comprising the whole of what in ancient times was current under his name,<sup>38</sup> and from the quotations of Aristotle himself it clearly follows that many of his works are lost.<sup>39</sup> Of the different

<sup>37</sup> Cic. Tusc. Disp. iii, 28. Itaque Aristoteles veteres philosophos accusans, qui existimavissent, philosophiam suis ingeniis esse perfectam, ait, eos aut stultissimos aut gloriosissimos fuisse; sed se videre, quod paucis annis magna accessio facta esset; brevi tempore philosophiam plane absolutam fore.

<sup>38</sup> There are three catalogues of his works, one in Diog. Laert. v. 22—28, another in the biography of Aristotle, given in the notes of Menage to Diog. Laert., and another from an Arabian source, given by Buhle, after Casiri, in his edition of the works of Aristotle, i. p. 306. Of all these the Arabian agrees best with the works still extant. Besides the works contained in the above catalogues, other works now lost are mentioned in different authors, upon which Fabricius may be consulted.

<sup>39</sup> Aristotle occasionally quotes the same work under different titles. It is consequently difficult to determine which of the quoted works are lost, or which are preserved under another title. I have noted the following: τὰ περὶ φιλοσοφίας, Phys. ii. 2; cf. de An. i. 2. differently, κατὰ φιλοσοφίαν, Eth. Eud. i. 8; De Part. An. i. 1; ἡ θεωρία ἢ περὶ τῶν φυτῶν, Hist. An. v. 1; cf. de Gen. An. i. 1; v. 3; De Long. et Brev. Vit. 6; τὰ περὶ τροφῆς, de Somno et Vig. 3; cf. de Gen. Anim. v. 4; τὰ ἐγκύκλια, Eth. Nic. i. 3; cf. de Cælo, i. 3. (Stahr considers this work the same as the Problems, since Gellius, xx. 4, quotes ἐγκύκλιο προβλήματα, which contain a passage found in the Problems. See Stahr Aristoteles bei den Romern. p. 132, ff. Compare also Bogesen de Problematis Aristotelis, (Hafn. 1836,) p. 23. But the ἐγκύκλια φιλοσώματα is unfavourable to Stahr's hypothesis.) Ἡ ἐν ταῖς ἀνατομαῖς διαγραφὴ, αἱ ἀνατομαί, αἱ ἀνατομαὶ διαγεγραμμέναι, Hist. An., iv. 1, 4; vi. 10, 11; τὰ ὑπὲρ τῶν ἐναντίων λεγόμενα, ἐκλογὴ τῶν ἐναντίων, διαίσεις τῶν ἐναντίων,

classifications of his works which the ancients give us, one especially is noticeable,—that into acroamatic or acroatic, and exoteric.<sup>40</sup> It is apparently supported by expressions of Aristotle himself, who, in his various compositions, often refers to his exoteric discourses or (λόγοι) writings,<sup>41</sup> but almost always in an ambiguous manner, and wherein an acquaintance with the meaning of the term is implied. In fact, the collation of passages leads to no certain result. It is possible that Aristotle may have meant to designate thereby those inquiries which lay without the circle of his strictly philosophical lectures, but that subsequent writers had misunderstood his meaning.<sup>42</sup> At least there is a pas-

Top. i. 8 ; Met. iv. 2 ; x. 3, are perhaps different works, perhaps parts of those still extant ; τὰ περὶ μίξεως, de Sensu, 3, is perhaps de Gen. et Corr. i. 10 ; τὰ περὶ τοῦ ποιεῖν καὶ τοῦ πάσχειν διωρισμένα, de Gen. An. iv. 3 ; de An. ii. 5, is perhaps de Gen. et Corr. i. 7—9.

<sup>40</sup> Cic. de Fin. v. 5 ; ad Attic. iv. 16 ; Plut. v. Alex. 7 ; adv. Colot. 14 ; Gell. xx. 5 ; Themist. Orat. xxvi. p. 319 ; Ammon. Herm. ad Arist. Cat. fol. 2. b. ; Simpl. Phys. fol. 2, b. Compare Buhle, de Distributione Librorum Aristotelis in exotericos et acroamaticos ejusque rationibus et causis, Goetting. 1786. The first part of this dissertation is to be found in the Bipont edition. On the difference between the esoteric and exoteric works see Stahr, Aristotelia, 2 vol. Plutarch, v. Alex., calls the acroamatic works epoptic. These have also been called esoteric (Clem. Alex. Strom. v. p. 575.) This, however, is evidently a later usage.

<sup>41</sup> Met. xiii. 1 ; Phys. iv. 10 ; Polit. iii. 6 ; vii. 1 ; Eth. Nic. i. 13 ; vi. 4 ; Eth. Eud. i. 8 ; ii. 1. As to the usage of language, it must be remarked that οἱ ἐξωθεν λόγοι, Polit. ii. 6, evidently indicates works not immediately concerning the present subject of discussion. In the same sense is the passage, Pol. i. 5, ἀλλὰ ταῦτα μὲν ἴσως ἐξωτερικώτερας ἰστί σκέψεως. From this, however, it does not follow that the expression ἐξωτερικοὶ λόγοι, when employed as a technical phrase with which the reader's or auditor's previous acquaintance is taken for granted, might not have had a wholly different meaning.

<sup>42</sup> There is a passage which renders it very doubtful whether the exoterical investigations are not comprised in the esoterical, and mean nothing more than those preliminary disquisitions with which Aristotle introduces all his scientific decisions. Phy. iv. 10, εἰχόμενον δὲ τῶν εἰρημένων ἰστί περὶ χρόνου ἐπελθεῖν. πρῶτον δὲ καλῶς ἔχει διαπορῆσαι περὶ αὐτοῦ καὶ διὰ ἐξωτερικῶν λόγων,

sage from which it would appear that Aristotle did make a distinction between his exoterical and philosophical researches;<sup>43</sup> and if we pay regard to the testimony of later authorities, who were acquainted with more of Aristotle's works than we are, there cannot be a question that they did observe a marked difference between them, which gave rise to the distinction of exoteric and acroamatic; which as it is said to have been observed by the Peripatetic school, in all probability rested on ancient authority.<sup>44</sup> What however is to be classed among the exoteric, and what among the acroamatic, is a question on which the opinion of the later commentators of Aristotle are divided. By some, the dialogues only;<sup>45</sup> by others, the dialogues, the historical and

*πότερον τῶν ὄντων ἔστιν ἢ τῶν μὴ ὄντων.* Weisse, in his notes to the Physics of Aristotle, is, as usual, very hasty in the rejection of all distinction between exoteric and acroamatic works. However, the passage admits of a different explanation; for *διὰ* may signify not merely by or in, but may be used to indicate a merely external connection. Aristotle, indeed, uses *διὰ* with the accusative in a peculiar sense, Phys. ii. 1, in.

<sup>43</sup> Eth. Eud. i. 8. *ἐπίσκεπται δὲ πολλοῖς περὶ αὐτῆς τρόποις καὶ ἐν τοῖς ἐξωτερικοῖς λόγοις καὶ ἐν τοῖς κατὰ φιλοσοφίαν.* Brandis (de perditis Aristotelis Libris de Ideis et de Bono, p. 10. not. 11.) considers the work *κατὰ φιλοσοφίαν* and *περὶ φιλοσοφίας* to be the same, but to my mind these two titles denote very different subjects. Cf. Pol. iii. 12, where *οἱ κατὰ φιλοσοφίαν λόγοις ἐν οἷς διώρισται περὶ τῶν ἠθικῶν* designates his ethical writings or lectures.

<sup>44</sup> Cic. de Fin. v. 5. According to Gellius, xx. 5, this division was recognised by Andronicus, who arranged the works of Aristotle.

<sup>45</sup> Ammon. Herm. l. 1. In the catalogue of the Aristotelian works in Diog. Laert. and the anonymous of Menage, there stands nearly at the beginning a series of treatises, mostly in one book, partly with proper names, partly with titles referring to their special subjects. These, I think, were dialogues; at least the work which bears the title *περὶ ψυχῆς δ*, and is also called *Ἐῶδημος*, was a dialogue, from which Plut. de Consol. 27, and probably Cic. de Div. i. 25, are fragments and partial extracts. Compare also Plut. v. Dion. 22. Another dialogue, *Κορίνθιος*, is mentioned, Them. Or. xxiii. p. 295; it is supposed that the *Νήριπτος* of the catalogue is the same. Also the treatise *περὶ*



the less scientific works,<sup>46</sup> are reckoned as exoteric. This seemingly indicates that, in the course of time, an accurate acquaintance with the tradition was lost. As the point is of importance for the right appreciation of Aristotle's works, we must hazard an opinion upon it. In most of the extant works we find Aristotle occasionally referring to his own treatises. But it is very seldom that any work is quoted which is not among those still preserved, and which belong to a particular circle of inquiry.<sup>47</sup> His physical works were, it is clear, regarded by Aristotle as a whole,<sup>48</sup> and in these, consequently, he only refers to preceding or succeeding passages. To this division of his works belongs the treatises on the soul and its states of life. The *Metaphysics* likewise, (assuming, that is, that these are the works which he understood by the first philosophy,) is mentioned in his *Physics* as containing speculations closely allied thereto.<sup>49</sup> Again, in the *Metaphysics* references are made to the logical treatises, especially the *Categories*, and the two *Analytics*;<sup>50</sup> and his logical works collectively are inti-

*δικαιωσύνης* was a dialogue. See Stahr, 187. So also the *ἱρωτικός* and the *συμπόσιον*, cf. *Athen.* xv. 16, p. 674.

<sup>46</sup> *Simpl.* i. 1.

<sup>47</sup> Properly only the *ἐγκύκλια* and the exoteric treatises; for the works on plants and anatomy belong to the natural history of animals, *περί μίξεως, περί αὐξήσεως, καὶ τροφῆς*, and *περί τοῦ ποιεῖν καὶ πασχειν*, belong to his physical treatises; *περί τῶν ἐναντιῶν* belongs to the logical or metaphysical works, to which it seems his work *περί φιλοσοφίας* must also be referred, which, according to Brandis, contained a discussion of the Platonic theory of numbers and ideas, and was therefore intended for a propædæutic of philosophy. Of the *ἐγκύκλια*, Buhle has conjectured that they are the exoteric treatises, and it is probable that they do belong thereto.

<sup>48</sup> See especially, *Meteorol.* i. 1.

<sup>49</sup> *Phys.* i. 4. de *Comm. an.* Mot. 6.

<sup>50</sup> *Met.* vii. 1, the reference *τὰ περί τοῦ ποσαχῶς* indicates the *Categories*,

mately allied to the Topics, and the treatise on Fallacies. Lastly, his ethical works,—the Ethics and the Politics,—stand in the closest dependence, as well upon each other, as upon the physical and metaphysical works, with which, combined with the ethical treatises, the rhetoric and the poetic are also connected. This, we think, is sufficient to prove that the principal part of Aristotle's extant works belong to a cycle of speculations which embrace all, or at least nearly all, that was regarded by the Peripatetics as the fundamental objects of philosophy.<sup>51</sup> Now, assuming that Aristotle divided his school generally into two classes, one of which applied to the cultivation of philosophy strictly understood, while the other was engaged with merely preparatory studies, less rigorous and methodical, and requiring less of scholarship for their due appreciation, it follows, that all the works which belong to the former cycle of study must be regarded as *acroamatic*. It appears probable that the division of the Aristotelian school was founded on a consideration of the different ends to which the pursuit of scientific inquiries might be subservient. While some might have in view nothing more than

and not the fifth book of the Metaphysics, as often supposed, although the contrary is held by Trendelenburg, (*de Aristotelis Categoriis*, p. 5,) who refers the quotation to *Met. v. 7*. Still, as this passage implies the Categories, the result is the same in either case. *Ib. vii. 12*.

<sup>51</sup> Of the ethical works, the Economics alone, for the greater part at least, is missing. As also the higher mathematics and the treatise on plants, among his physical works, which, however, might have received in details considerable enlargement. The problems on mechanics, which are still extant, belong to the mathematical works, although we are unable to trace the relation of this work to the whole branch of mathematical inquiry. The elements of mathematics, indeed, but not the whole subject, Aristotle looked upon merely in the light of a mental exercise for youth. *Eth. Nic. vi. 9*.

a general enlargement of mind, such as might qualify them for forming a judgment of learned works, with others science and erudition were the sole end and object of their labours.<sup>52</sup> These different ends were naturally considered, when learning became bound up with philosophy. This apparently was the origin of the division of Aristotle's school and works, and in the general features of the latter there is much to support this conjecture. The style of them has at times been highly extolled, and undoubtedly its nervous brevity is remarkable, but its faults are numerous, as all but servile admirers must admit. In general, his ideas are loosely thrown out, and so inadequately explained, that the reader divines rather than apprehends his meaning; his connection is often careless, often involved and abrupt, and occasionally even ungrammatical. This want of order, and incoherency, relates not merely to particular passages, but extends to considerable portions, and has often led the editors and commentators of his best known works to suspect considerable chasms, or unskilful restitutions of the text. Indeed, if it were right to judge of the merits of Aristotle's composition by his extant works, we should be forced to pronounce him a clumsy and unskilful writer. Such a judgment, however, would conflict strangely with the opinion of Cicero, who gives to Aristotle the praise not only of brevity and compression, but also of an agreeable style.<sup>53</sup> Cicero would

<sup>52</sup> Thus Aristotle distinguishes between *παιδεία* and *ἐπιστήμη* relatively to the different relations of the respective students, de Part. An. i. 1. in. Thus too the *πεπαιδευμένοι* are opposed to the *εἰδότες* in the Pol. iii. 11.

<sup>53</sup> De Invent. xi. 5; Top. 1. *brevitas, copia, et suavitas.*

hardly have pronounced such an encomium in deference to the established reputation of any writer, but his judgment was doubtless influenced by an acquaintance with his exoterical works, in which, if we may judge from a few fragments, Aristotle employed a richer and more embellished style than in his extant works.<sup>54</sup> But even in these the style is far from uniform, and we meet with occasional passages which fully warrant the more favourable judgment of Cicero, and suggest the conclusion that the absence of ornament and grace is not to be ascribed to any incapacity, but to the good sense of the writer, who felt them to be inappropriate to works of such a nature. In my opinion, all the critical difficulties will be at once removed if we suppose that Aristotle's works, which are evidently connected together, were originally composed as outlines of his lectures, and were subsequently published for the use of those only who, having heard his lectures, were capable of understanding them. This will also serve to explain references in one work to another which was written at a later date. For in the course of time, Aristotle might probably make many additions to these outlines, omit much in the delivery, and orally supply that want of connection which we at present experience.<sup>55</sup> It is only

<sup>54</sup> As such fragments of the exoterical works, I consider the passage from the Eudemus, Plut. Consol. ad Apoll. 27. and the brilliant passage in the version of Cicero de Nat. Deor. ii. 37. Stob. Serm. lxxxvi. 24, and 25, gives two fragments from a dialogue, *περὶ ἐβγνείας* of which I agree with Kopp in doubting the authenticity. The quotation in Sext. Emp. adv. Math. ix. 20, sq. may also be from some exoterical work.

<sup>55</sup> The Topics were written before the Analytics, which, nevertheless, are quoted, Top. viii, 11, 13. The treatise de Cœlo, ii. 2. cites that on the movement of animals, and yet according to Meteorol. i. 1. it must have preceded it in date of composition. In the history of animals, that on plants is alluded to,

on this supposition that we can account for the numerous and almost verbal repetitions of whole passages, not only of distinct, but of the same treatises, which in all probability owe their origin to an incomplete revision, or perhaps they were intentional extracts.<sup>56</sup> Of this nature, and intended originally as notes for Aristotle's lectures to his select and more accomplished disciples, and comprising as it were the body of his doctrine, were the acroamatic works, in reference to which all other works might well be quoted as exoterical. On this ground I would assign to the former class, not only such works as are strictly philosophical, but the *History of Animals*, and that of *Plants* also, if it were in existence,<sup>57</sup>

although we see from *de Gen. An.* i. 1 ; v. 3 ; *de Long. et Brev. Vitæ*, 6 ; compared with *de Gen. An.* i. 3, 4 ; 11, 20 ; ii. 4, 7 ; *de Long. et Brev.* v. 6 ; that the latter was subsequent to the former. The treatise *de Gen. An.* ought immediately to follow that *de Part. An.* yet the former quotes the work on the causes of sleep as an earlier work, and that on food as a later ; see *de Gen. An.* v. 1, 4 ; *de Part. An.* iv. 14, fin. (Buhle, *de Distributione Libr. Arist.* p. 75. proposes to read *κινήσεις* for *γενέσεις*, which, however, only removes one difficulty by another), whereas the *de Somno*, 3. quotes that on nourishment as an earlier work. Again, the *de Juv. et Sen.* 3. quotes the *de Part. An.* ; which, on the other hand, ii. 10 ; iii. 6 ; iv. 13 ; quotes the *de Sensu*, and the *de Respiratione*, which are closely connected with the *de Juv. et Sen.* The treatises on the soul and the first philosophy, (*Metaphysics*,) are quoted in the *de Anim. Mot.* 6 ; but the conclusion attaches these works to those on the soul, etc. etc. Therefore that *περί γενέσεως*, and also of animals must follow. For brevity's sake, I omit to mention similar quotations, which, however, are more complicated, and not expressly indicated. It is true, that many of these may be explained as interpolations ; others, by the rejection of entire books, as spurious. But without such extreme criticism we may very well adopt the conclusion I have hazarded, which is confirmed by Niebuhr's examination of the *Rhetoric of Aristotle*. See *Hist. of Rome*, 2 ed. vol. i. p. 15, note 20, (Eng. transl.) Niebuhr here explains in a similar way the distinction between the exoterical and esoterical works.

<sup>56</sup> The numerous repetitions of the *Metaphysics* have already been noticed. It is here that they are the most frequent and most considerable, especially in the 11th Book. They also occur in other works also.

<sup>57</sup> The work, *de Plantis*, which stands among those of Aristotle, is allowedly a translation at third or even fourth hand. Its original character it is con-

and the treatises on Rhetoric and Poetry, as presupposing a knowledge of Logic and Politics.<sup>58</sup> Indeed, we are even disposed to admit the Problems, since they suppose a variety of learned acquirements, and at least are preparatory, as matters of erudition, to the study of philosophy. Of the exoterical writings, on the other hand, we probably do not possess a single work entire. Compared with the scientific richness of the acroamatic works, they quickly fell into oblivion and neglect, in those ages which little regarded the elegancies of style.<sup>59</sup> In all probability they would contribute but little to the understanding of Aristotle's philosophical system; for, on the one hand, we possess a tolerably complete exposition of it in the acroamatic works, and, on the other, it is only a likely conjecture that in the dialogue not merely the form, but the matter in some degree disagreed from the strict acceptation of his theory.

When we examine the extant works of Aristotle, we must not neglect the singular history of his acroamatic writings. They were, it is said, bequeathed in the first instance to Theophrastus the scholar and successor of Aristotle, and by him to his disciple Neleus of Scepsis. By Neleus they were brought to Scepsis and left as an inheritance to his descendants, men of unscientific character,

sequently difficult to determine. Arabic conceptions and ideas are distinctly recognisable in it.

<sup>58</sup> Rhet. i. 2; Poet. 19.

<sup>59</sup> A traditionary story makes Aristotle and his disciple Theophrastus, give up the composition of dialogue in despair of ever attaining to the grace and eloquence of Plato's style. Basil. Magn. Ep. 167. I, too, must confess that, in my own judgment, Aristotle's powers of composition are not of the highest order.

by whom they were kept with little care, and at last concealed under ground, in order to elude the book-mania of their sovereign, the king of Pergamos. They were at last drawn from their concealment greatly damaged by the damp and vermin and sold at a high price to Apellicon of Teius, who, although little versed in philosophy, and possessing still less of judgment, attempted to restore the obliterated manuscript, and afterwards published them full of faults. Subsequently, the library of Apellicon fell among the spoils of Athens into the hands of Sylla, and was carried to Rome, where the grammarian Tyrannion had access to them. From him copies were obtained by Andronicus of Rhodes, which served for the basis of his arrangement of the Aristotelian works.<sup>60</sup> Too much I think has been built upon this story : on its authority it has even been pretended that the works of Aristotle have reached us in a more broken and ill-arranged shape than any other work of antiquity. To my mind, the story arose out of some laudatory commendation of the edition of Aristotle by Andronicus ; it is probable, not to say certain, that there were other editions,<sup>61</sup> of the respective merits of

<sup>60</sup> Strabo, xiii. p. 124, etc. ; Plut. v. Syll. c. 26 ; Athen. v. 53, p. 214 ; cf. Brandis, *On the Fortunes of Aristotle's Works, and some Criticisms on their Authenticity*, in the *Rhein. Mus. für Philol.* i. 3. s. 236, etc. ; and Kopp, *Nachtrag zur Untersuchung ü. d. Schicks. d. Aris. Schriften*, ib. iii. 1. p. 93, etc. ; Stahr, *Aristotelia*, ii. History of the Aristotelian writings from Aristotle to Andronicus of Rhodes. Brandis, who questions the correctness of the given stories, apparently insists too much on the conclusion, that in case of the correctness of the Recension of Andronicus it would possess an overwhelming authority. He had not the original MSS. of Aristotle to consult immediately ; on the contrary, others had availed themselves of the same copies as Tyrannion, and it is far from being asserted that the copies in the library of Neleus, were in the hand-writing of Aristotle.

<sup>61</sup> This follows from the fact, that of several works, the *Categories* and the

which it was possible to make a comparison. At any rate, the acroamatic works of Aristotle have not reached us solely from the library of Neleus, and consequently it was unnecessary to have recourse merely to the restorations of Apellicon either to complete or to retain the chasms resulting from the deterioration of the manuscripts.<sup>62</sup>

We may assume it as certain that so great and extravagant stress would not have been laid upon the above narrative, but for the obscurity of the plan and co-ordination of the Aristotelian writings, and the doubts arising from ancient testimony and individual judgment as to their total or partial genuineness. It is known from commentators of Aristotle that many and widely differing treatises on the same subject,<sup>63</sup> and many spurious works were formerly current under his name. Several explanations are given of this circumstance;<sup>64</sup> of these the most important to notice is the assertion that the Peripatetics, Theophrastus, Eudemus, and Phantias, in emulation of their master, left behind them similar works with similar titles, which were afterwards the occasions of great confusion. Un-

*Analytics*, for instance, many copies were extant. The Alexandrian library is said to have contained books out of those of Aristotle and Neleus, *Athen. i. p. 3*. Athenæus, indeed, in contradiction to the above statement, declares that all the books of Neleus were carried to Alexandria. The Grammarian is inaccurate. Long before the time of Andronicus, Ptolemy Philadelphus had written on the works of Aristotle. *David ad Cat. in Schol. in Arist. p. 22. a.*

<sup>62</sup> The Alexandrian Manuscripts were consulted by Andronicus in his revision of Aristotle, see Brandis, *ib. p. 250. n. 42*.

<sup>63</sup> Two different revisions of the *Categories* and the fourteen books of the *Analytics* are spoken of. *Simpl. in Categ. fol. 46*; *Ammon. Herm. in Categ. fol. 36*; *Schol. in Arist. p. 39. a.* There were also two copies of the *Physics*. *Simpl. Phys. f. 242. a.* The three different *Ethics* afford another instance of of the same kind.

<sup>64</sup> *Ammon. Herm. ib.*



doubtedly it was often difficult to distinguish the works of the master from those of his disciples, who probably imitated with great diligence and success not merely his tone of thought, but his very style; indeed, the more so, as Aristotle's manner is so marked as to require no extraordinary skill to imitate successfully its more prominent features, and to defy detection. Consequently, it is by no means easy to separate the genuine works of Aristotle from the imitations of his disciples. This difficulty is further increased by the loose texture of his writings, which has often created a suspicion of the spuriousness of particular parts, even when the general authenticity of the work has been satisfactorily established. Moreover, the criticism of the text has been hitherto neglected,<sup>65</sup> and an immense mass of erudition is indispensable to a full and just appreciation of his several works. On the other hand, we are not without external aids for the historical examination of these works. Thus the unbroken series of commentators beginning with Andronicus of Rhodes, and who give their concurrent testimony to the genuineness of many of the works in question, is an authority not to be rejected, since they distinguish the genuine text from the additions of the earliest Peripatetic, and adduce passages from the writings of Aristotle himself, which prove, or at least render probable, the authenticity of most of the extant books.<sup>66</sup> Indeed, in a purely historical examina-

<sup>65</sup> The Berlin edition, however, has done good service to the text of Aristotle.

<sup>66</sup> On the value of these authorities we have a very valuable discussion from Brandis, in the second part of the treatise already quoted, *ib. i. 4. p. 259.*

nation we seldom dare go beyond the works collected by Andronicus, Adrastus, and Alexander of Aphrodisia, as those of Aristotle. A further help is afforded by the quotations of other works by Aristotle, to which we have already alluded, and which indeed are not always to be trusted, though for the most they are so interwoven in the context where they occur, that their omission would immediately be felt.<sup>67</sup> These quotations establish the

<sup>67</sup> We shall here give a list of these quotations: it is not perhaps correct, as it was not drawn up expressly for the work. We shall only give the more direct references.

1 The Categ. are quoted in the Met. vii. 1, (*τὰ περὶ τοῦ ποσαχῶς*).

2 The Top. are quoted in de Interpret. i. 3; Anal. Pr. i. 1, 30; ii. 17, 19; de Repr. Soph. i. 2; Rhet. i. 1, 2; ii. 22, 24, 26.

3 The Analyt. are cited in de Interpret. ii; Analyt. Post. i. 3, (*τὰ περὶ συλλογισμοῦ*); Top. viii. 4, twice; de Repreh. Soph. i. 2; Met. vii. 12; Eth. Nic. vi. 3; Eth. Eud. i. 6; ii. 6, 10; v. 3; Magn. Mor. ii. 6; Rhet. i. 2, several times.

4 The Repreh. Soph. are probably quoted in de Interpret. 6, fin.

5 The Physics are mentioned, as subsequently to appear, in the Analyt. Post. ii. 12, (*τὰ περὶ κινήσεως*); quoted in Meteor. i. 1, (*περὶ τῶν πρώτων αἰτίων τῆς φύσεως καὶ περὶ πάσης κινήσεως φυσικῆς*); Met. i. 3; xi. 6, 8; xii. 8; xiii. 1.

6 The de Cælo is quoted Meteor. i. 1.

7 The de Gen. et Corr. is quoted in the Met. i. 1; perhaps also in de Gen. An. iv. 3, (*τὰ περὶ τοῦ ποιῆν καὶ πάσχειν διωρισμένα*); de An. ii. 5, (*οἱ καθόλου λόγοι περὶ τοῦ ποιῆν καὶ πάσχειν*); de Sensu, 3, (*περὶ μίξεως*).

8 The Meteor. is quoted in de Plantis, ii. 2.

9 The Histor. Anim. is quoted in de Part. An. ii. 1; iii. 5, 11; iv. 5, 8, 10, 11, 12, 13; v. 3; de Gen. An. i. 3, 4, 11, 20; iii. 1, 8, 10, 11; de An. Inc. 1; de Respir. 12, 16.

10 The de Part. is quoted in de Gen. An. i. 1; 15, 19; de Juv. et Sen. 3; de Comm. An. Mot. 11, fin.

11 The de Gen. An. is noticed as a work which ought to follow in the de Part. An. ii. 3; iii. 5; iv. 4, 12; de Comm. An. Mot. 11, fin.; Hist. An. iii. 22.

12 The de Anima is quoted de Interpret. 1; de Gen. An. ii. 3; v. 7; de An. Inc. 19; de Sensu, 1; de Comm. An. Mot. 6, 11, end, (as a work immediately following.)

13 The de Sensu is quoted de Part. An. ii. 10; de Gen. An. v. 2, 7; de Comm. An. Mot. 11, fin.

authenticity of most of the writings of Aristotle, so far at least as it is possible by such means. But the ultimate test in all inquiries of this nature must be drawn from what is usually designated internal evidences ; i. e. we must look to the mutual coherency of the several works, and to the degree in which each separate preserves a general agreement to the Aristotelian style and conception, and thence determine their respective genuineness or spuriousness.

The works current under Aristotle's name have not as yet been submitted to a scientific examination, and the character of the present age appears ill-suited for such a task, to judge at least from the wild extravagance of some attempts in this class which have been lately put forth. Fortunately for us, the writings which are indispensable for the right

14 The *de Memor.* is announced in *de Sensu*, 1 ; quoted in *de Comm. An. Mot.* 11, fin.

15 The *de Somno* is announced in *de Sensu*, 1 ; quoted in *de Gen. An.* v. 1 ; *de Com. An. Mot.* 11, fin.

16 The *Comm. An. Mot.* is quoted *de Cælo*, ii. 2, though perhaps it is rather *de Inc. An.*

17 The *de Long. et Brev. Vit.* is quoted as a subsequent work, *de Gen. An.* iv. 10.

18 The *de Juv. et Sen.* is announced in *de Sensu*, 1 ; *de Long. et Brev. Vit.* 6.

19 The *de Vita et Morte*, ib.

20 The *de Respir.* is announced in *de Sensu*, 1 ; quoted in *de Part. An.* iii. 6 ; iv. 13.

21 The *Ethics* is quoted *Pol.* iii. 12 ; iv. 1 ; *Met.* i. 1, but in suchwise that the particular moral works is doubtful.

22 The *Polit.* is quoted *Rhet.* i, 8.

23 The *Rhet.* is promised in *de Poet.* 19.

24 The *de Poet.* is promised in *Pol.* viii. 7 ; quoted in *Rhet.* iii. 1.

25 The *Probl.* are quoted in *de Part. An.* iii. 15 ; *de Gen. An.* ii. 8 ; iv. 4, 7 ; *de Somno*, I.

26 The *Metaph.* is mentioned, as a work to appear afterwards, in the *Phys.* i. 4, quoted in *de Comm. An. Mot.* 6. It is worthy of remark that every one of the works so quoted, has always been accounted authentic.

understanding of Aristotle's philosophy, with which alone we are immediately concerned, admit of an easier decision than the other which contain more isolated and more partial branches of inquiry. In the first place, it is necessary to remark that the authenticity of Aristotle's works cannot be tested by the standard which is usually applied to the decision of the other works of antiquity. It is important to bear constantly in mind the scope and design of each work, and the motive of its composition; to which points we have already alluded. Perhaps, indeed, the term genuineness must be understood in their case in a modified sense, and not in its more usual and correct acceptation. For it is more than probable, that among the works of Aristotle we have many which did not come originally from his hand, in their present shape at least. The works, for instance, which are known as the *Metaphysics*, cannot owe their present order, or rather disorder, to their author,<sup>68</sup> and yet the treatises severally exhibit beyond question the style, the learning, and the judgment of Aristotle. The right arrangement of these books and their several parts, is a problem which has hitherto defied all endeavours; for the difficulty, consisting in excess rather than deficiency, is of a nature which can neither be attributed to the fretting of the moth or

<sup>68</sup> Brandis, p. 242, obs. 19. tells us, that Aristotle having, as it is said, sent the books of the *Metaphysics* to Eudemus, who after Aristotle's death, declined to make them public, his successors (*οἱ μεταγενέστεροι*) endeavoured to supply their place by making extracts from Aristotle's other works. This is the tradition which is found in the beginning of the unpublished commentary on the *Metaphysics*, by Asclepias, whose authority in itself is insignificant. In all probability he derived it from the more ancient commentators, perhaps Alexander, to whom he is indebted for all that he has of any value.

mildew, nor to the ignorance and stupidity of any compiler.

We are, therefore, disposed to conjecture that Aristotle did not leave behind him any complete work on the first philosophy, but merely partial treatises, which were afterwards collected together, without any attempt at arrangement. It is also singular in another respect, that we should possess a superfluity in the moral writings of Aristotle. If we possessed any one of the three *Ethics* singly, it would not be easy to adduce grounds for its rejection, yet there are many passages in each of the three which we possess which excite the gravest suspicions of their authenticity, and which at least induce a belief that *Eudemian Ethics*, and *Magna Moralia* were compilations formed upon the lectures of Aristotle. Of the genuineness of the *Politics* no doubt can be entertained, and it is clear from them that Aristotle had some intention of writing on *Economy*. In all probability, however, we are indebted to an abridgment of *Theophrast's* for the first part of the work on this subject.<sup>69</sup> In the next place, the treatises which are usually comprised under the title of *Organon*, is, in our opinion, the work of Aristotle, at least in its essential portion, although weighty objections may be urged against the second part of the *Categories*, the so-called *Hypothēoriæ*, and the treatises on Interpretation, (*περὶ ἑρμηνείας*), which although rejected by an ancient critic, has by another been to all appearance triumphantly de-

• Cf. Gottling, preface to the *Œconomics*, p. vii.

fended.<sup>70</sup> Of the physiological works, the first, the *Physics*, is perhaps the best authenticated work of Aristotle, and it is only a devotion to Aristotle, as blind as it is unmeaning, that would seek to wrest any considerable portions of it from the transmitted arrangement. With this the other physical writings are in such close dependence that it would not be easy to detach any one of the series from the place where it now stands. The works *de Cœlo*, *de Generatione et Corruptione*, *de Meteoris*, *de Animalibus*, *de Animâ*, and the small treatises connected with the last, form a systematic series which everywhere betokens the learning and method of Aristotle. The work on the movements of animals does not, it is true, easily find a place in the series, but otherwise it is apparently beyond suspicion. The *Problems* have, it must be confessed, reached us in a most confused state, but in all probability contain collections of certain problems which he designed for after solution. It would no doubt be dangerous to draw from them any doctrinal conclusions, partly because they contain only occasional thoughts, the suggestions of the moment, and partly because of their extreme incoherency and want of arrangement.<sup>71</sup> The work *de Mundo* has been satisfactorily proved not to be Aristotle's. While the other works in the usual catalogue of Aristotle's writings are of none or little importance for the history of philosophy.

<sup>70</sup> Andronicus of Rhodes rejected the treatise *de Interpretatione* and the *Hypothetice*, which were defended as authentic by Alexander of Aphrodisias. Alex. Aphr. ad libr. 1; *Analyt.* fol. 52, a. ed. Ald.; Boeth. in *Categor.* iv. init.; *Simpl.* in *Categor.* fol. 95, b.

<sup>71</sup> See Bojesen, *de Problematis Aristotelis diss.* Hafn. 1836.

## CHAPTER II.

### THE PHILOSOPHY OF ARISTOTLE IN GENERAL.

WHEN we pass from the Platonic to the Aristotelian philosophy, we cannot fail to perceive that they were both elaborated from very proximate but yet essentially different states. And this, exactly, is the signature of great minds,—to be almost perfect representatives of whatever is peculiar and characteristic in their age.

As Plato's activity fell within an age in which the Athenian people were content, for the most part, to be spectators of events, and retiring within itself to reflect upon the inner springs of human conduct, his philosophical system for the most applied itself to the contemplation of the inner, and only deigned to regard the outer so far as it might perhaps exert an influence on the former. But it is not the end of man's being to be absorbed in himself, and to be lost in inward contemplation, and the course of events gradually brought about a position of things which compelled Greek mind to look beyond itself to the wide circle of surrounding objects. The great and important revolutions which now commence in history, and which for the most led to permanent results, extended the sphere of Greek interest, which, confined to the narrow sphere of self, had lost all vital energy, to a wider scene, and it would almost seem that the men-

tal enlightenment, which had spread such lustre upon Greece, was only designed to accomplish, as its ulterior end, the improvement and civilisation of surrounding nations. In such a condition of things, science would have two principal objects; to collect Greek mind and arrange the scattered and unconnected results of independent inquirers in arts and science, and to give a compendious view of the objects and laws of the external world which furnishes the materials for man's ingenuity and industry. To accomplish these useful objects engaged all the energies of Aristotle, and this circumstance accounts at once for the two leading features of his scientific character, his encyclopædiac labours, and his predominant inclination to physics.

Now as Aristotle's view was thus directed to the diversified pursuits of science, and the multitude of natural phenomena, it was no easy task to collect and to compare the variety of subsisting opinions in this wide domain of thought, and out of it to extract and to set in its proper light whatever it contained of value and of truth. That he did attempt so vast a design, is clear from the importance he ascribed to the examination of the opinions of the earlier philosophers and scientific thinkers, and maintained its utility as likely to lead either to new results, or to confirm those already obtained.<sup>1</sup> Consequently his researches were directed on all sides to the actual and the existent. In philosophy, especially, he investigated the opinions of every philosopher, to which he attached his own disqui-

<sup>1</sup> Met. i. 3; Top. i. 2.



sitions. In physics, his chief, if not entire merit, rests in his prosecution of natural history. And even in ethics or politics, his principal, if not sole object, is to compare the opinions of individuals and societies on the just and the good. Now it is not in some of his works merely, that these erudite labours are traceable, they are not distinct from, but closely interwoven with, and indeed frequently form the basis of his philosophical researches. In this tendency of Aristotle, no surprise can be felt at the great value he set upon the knowledge of the actual,—of facts. But however highly he esteemed experience and sensation as its source,—he was far from unable to follow the higher scientific flight which had been taken by Socrates and Plato; on the contrary, the chief object of his labours was not phenomena, merely as phenomena, or in his phraseology, the “what,” but their grounds, or the “why” and the “wherefore” of them. For Aristotle was not so unworthy a disciple of Plato as to overlook the fact, that the knowledge of the first grounds and of the good is the most perfect science.<sup>2</sup> Now as Aristotle strove with equal zeal to seize and apprehend facts such as they really present themselves, and to gain a philosophical knowledge of the first grounds of things, we must ascribe to him the true character of philosophy, which,

<sup>2</sup> Met. i. 2. *μάλιστα δὲ ἐπιστητὰ τὰ πρῶτα καὶ τὰ αἷτια· διὰ γὰρ ταῦτα καὶ ἐκ τούτων τὰλλα γνωρίζεται, ἀλλ’ οὐ ταῦτα διὰ τῶν ὑποκειμένων· ἀρχικωτάτη δὲ τῶν ἐπιστημῶν καὶ μᾶλλον ἀρχικὴ τῆς ὑπηρετούσης ἢ γνωρίζουσα τίνος ἕνεκά ἐστι πρακτικόν ἕκαστον· τοῦτο δ’ ἐστὶ τὰγαθὸν ἐν ἐκάστοις, ὅλως δὲ τὸ ἄριστον ἐν τῇ φύσει πάση. ἐξ ἀπάντων οὖν τῶν εἰρημίων ἐπὶ τὴν αὐτὴν ἐπιστήμην πίπτει τὸ ζητούμενον ὄνομα (sc. τῆς σοφίας)· διὸ γὰρ αὐτὴν τῶν πρῶτων ἀρχῶν καὶ αἰτίων εἶναι θεωρητικὴν· καὶ γὰρ τὰγαθὸν καὶ τὸ οὐ ἕνεκα ἐν τῶν αἰτίων ἐστίν.*

while it considers nothing that happens as unworthy of notice, nevertheless sets the chief value upon a knowledge of first causes. Still we must admit, what indeed was almost inevitable, that these opposite directions of his labours, the pursuit, on the one hand, of that which is most akin to sensuous perception, and on the other, of that, which receding most remotely therefrom, approximates the nearest to the ultimate causes,<sup>3</sup> do at times show themselves in seeming contradiction, and frequently involve the mind of Aristotle in great doubt and indecision. This was the rather to be expected the more completely his investigations embraced the conflicting views of other minds, and the more earnestly he sought to reconcile the different opinions of able and honest inquirers. To this cause we must ascribe his indecision and almost sceptical reserve in many of his disquisitions, the numerous limitations of his own conclusions, and the many exceptions which he admits in nature to his general laws. This indecision is most strikingly shown when at times in his researches into the grounds of things he sees himself suddenly abandoned by phenomena, and yet feels that he ought to form some conclusion on the point in conformity with the general principles of his theory. Then he freely confesses that he dares not hazard an assertion, we must wait, he says, for further phenomena, for phenomena are more to be trusted than the conclusions of the reason ;<sup>4</sup> and above all, it is impossible

<sup>3</sup> L. l. σχεδὸν δὲ καὶ χαλεπώτατα ταῦτα γνωρίζειν τοῖς ἀνθρώποις τὰ μάλιστα καθόλου πορρωτάτω γὰρ τῶν αἰσθήσεών ἐστιν.

<sup>4</sup> De Gen. Anim. iii. 10. οὐ μὴν εἰληπταί γε τὰ συμβαίοντα ἱκανῶς,

that the grounds of reason can attain to the accuracy of sensuous perception.<sup>5</sup> These observations display not only a certain distrust in the cognition of causes, but also a comparatively greater confidence in the results of experience. But in all these cases of hesitation it is clearly manifest that he starts with certain steady convictions concerning the highest problems of science, and that it is only in the application of his ultimate principles to the domain of experience that he evinces any great uncertainty. The reasons of this will be the more palpable after the examination of the different parts of his philosophy.

In Aristotle, as in Plato, we by no means perceive a strict separation of philosophy from what properly belongs to other branches of science or of intellectual enlightenment, and accordingly, we have here also the difficult task of separating, conformably with the Aristotelian notion of philosophy, the truly philosophical from the subordinate scientific labours which are incorporated with it. While Plato was forced to wander among and to explore all the branches of mental exertion, in order to establish for philosophy her appropriate rank and position, Aristotle, on the contrary, was able to consider the same end from a very simple point of view. This we must regard as an evidence of a considerable advance in the evolution of philosophy ; for unquestionably Aristotle's confidence in

*ἀλλ' ἰάν ποτε ληφθῇ, τότε τῇ αἰσθήσει μᾶλλον τῶν λόγων πιστευτίον καὶ τοῖς λόγοις, ἰὰν ὁμολογούμενα διικνύωσι τοῖς φαινομένοις.*

<sup>5</sup> *Polit. vii. 7, fin.* οὐ γὰρ τὴν αὐτὴν ἀκρίβειαν δεῖ ζητεῖν διὰ τε τῶν λόγων καὶ τῶν γινομένων διὰ τῆς αἰσθήσεως. Another ἀκρίβεια is, on the other hand, assigned to the higher unsensuous sciences. *Met. i. 2.*

the justice of his own view was mainly founded on the results of Plato's researches. With Aristotle the true nature of philosophy seemed to result most clearly from a comparison of it with dialectics, and even with sophistics. For, he said, the object of the Dialecticians and the Sophists is to attain to that consideration which the philosopher rightfully enjoys.<sup>6</sup> He then observes that all sciences set out respectively from certain principles, that these sciences are themselves open to investigation, but not by their own principles, since they are part of the sciences themselves; and therefore the investigation must proceed upon principles universally valid and applicable, which consequently cannot be considered the principles of any one of them in particular. Now dialectic conducts its inquiries by starting from that which is founded on opinion merely, (*ἔνδοξον*), and subjects every science to examination. (It is here necessary to observe that Aristotle employs the word dialectic in a different sense from Plato.) But dialectic is merely an art of investigation, whereas philosophy, directing its attention to the same object, does not pay regard to mere opinion; but by scientific reasoning ascertains and establishes the grounds on which all science rests.<sup>7</sup> Aristotle accordingly sought to de-

<sup>6</sup> Met. iv. 2.

<sup>7</sup> Top. i. 2. Where the philosophical utility of dialectic is canvassed. *ἔτι δὲ πρὸς τὰ πρῶτα τῶν περὶ ἐκάστην ἐπιστήμην ἀρχῶν. ἐκ μὲν γὰρ τῶν οἰκείων τῶν περὶ τὴν προτεθείσαν ἐπιστήμην ἀρχῶν ἀδυνατὸν εἰπεῖν τι περὶ αὐτῶν, ἐπειδὴ πρῶται αἱ ἀρχαὶ πάντων εἰσὶ· διὰ δὲ τῶν περὶ ἕκαστα ἐνδόξεων ἀνάγκη περὶ αὐτῶν διελθεῖν· τοῦτο δ' ἴδιον ἢ μάλιστα οἰκείον τῆς διαλεκτικῆς ἐστίν· ἐξεταστικὴ γὰρ οὐσα πρὸς τὰς ἀπασῶν τῶν μεθόδων ἀρχὰς ὁδὸν ἔχει.* 1b. viii. 11; de Repreh. Soph. 2; Met. iv. 2. *καὶ ἔστι τοῦ φι-*

termine some universal notion which might serve as the foundation of the special sciences, and which therefore is the proper object of philosophical research, and which he found in the notion of being.<sup>8</sup> In the same manner he laboured to find the supreme and universal principle on which all the sciences depend, and this he found in the principle of contradiction.<sup>9</sup> Here, again, Aristotle coincides with Plato, and with him maintains the necessity of this initiative of science being something not hypothetical, for whatever is necessary to every one in his cognition of any being, cannot possibly be hypothetical,<sup>10</sup> or require a further grounding.

On comparing this notion of philosophy with the Platonic we might at first perhaps be disposed to regard them as nearly identical; nevertheless there is an essential distinction between them, which becomes apparent as soon as we examine the relation which it holds in Aristotle's system to all other mental developments. For the very definition of philosophy, as the science of the ultimate grounds of all being, essentially distinguishes it from every species of operation and action. In the first place, it has nothing to do with the arts of life, which pursue a certain extraneous end and aim, and which have for their object not the eternal and necessary,

λοσόφου περὶ πάντων δύνασθαι θεωρεῖν. Ib. c. 3; Phys. i. 2. Hereto belongs also the comparison of dialectic with rhetoric, Rhet. i. 1.

<sup>8</sup> Met. iv. 2. οὕτω καὶ τῷ ὄντι, ᾧ ὄν ἐστι, τινὰ ἴδια καὶ ταῦτ' ἐστι περὶ ὧν τοῦ φιλοσόφου ἐπισκέψασθαι τὰ ληθές. Then follows the comparison of the philosophers and the dialecticians and sophists.

<sup>9</sup> Ib. c. 3.

<sup>10</sup> Ib. — καὶ ἀνυπόθετον· ἦν γὰρ ἀναγκάσιον ἔχειν τὸν ὁτιοῦν ξυνιέντα ὄντων, τοῦτο οὐκ ὑπόθεσις.

which is always the same, but that which in different circumstances may be different.<sup>11</sup> In the next place, he distinguishes it from the moral prudence (*φρόνησις*) in conduct, which has indeed its proper end and aim within itself, but which nevertheless is not eternal and the immutable, but may exist differently, and consequently is only cultivated by the reason in its relation to the concupiscible portion of the soul, and therefore falls within the domain of opinion.<sup>12</sup> The wisdom therefore which is the object of philosophy is directed exclusively to the cognition of the grounds and limits of all proof, and also of all the legitimate consequences deducible from these grounds,<sup>13</sup> and consequently is wholly distinct from any human good which we may strive after. Now, without seeking to blame Aristotle as drawing the limits of philosophy too narrowly, by confining its investigations exclusively to the domain of science, we must nevertheless observe, that he does exhibit a mode of thinking somewhat alien from the spirit of the Socratic philosophy, and that especially he overlooks, at least, if he is not ignorant of, that unity of all mental efforts which Plato so carefully and earnestly maintains. This discrepancy of view between Plato and Aristotle is intimately connected

<sup>11</sup> Eth. Nic. vi. 4 ; Magn. Mor. i. 35.

<sup>12</sup> Eth. Nic. vi. 5. — οὐκ ἂν εἴη ἡ φρόνησις ἐπιστήμη οὐδὲ τέχνη· ἐπιστήμη μὲν, ὅτι ἐνδέχεται τὸ πρακτὸν ἄλλως ἔχειν· τέχνη δ', ὅτι ἄλλο τὸ γένος πράξεως καὶ ποιήσεως.—δυσὶν δ' ὄντοιν μεροῖν τῆς ψυχῆς τῶν λόγων ἔχόντων, θατέρου ἂν εἴη ἀρετὴ, τοῦ δοξαστικοῦ. Magn. Mor. i. 1.

<sup>13</sup> Eth. Nic. vi. 7. δεῖ ἄρα τὸν σόφον μὴ μόνον τὰ ἐκ τῶν ἀρχῶν εἰδέναι, ἀλλὰ καὶ περὶ τὰς ἀρχὰς ἀληθεύειν, ὥστ' εἴη ἂν ἡ σοφία νοῦς καὶ ἐπιστήμη καὶ ὥσπερ κεφαλὴν ἔχουσα ἐπιστήμη τῶν τιμωτάτων. Magn. Mor. i. 1.

with the difference of their mental characters. Plato, we have seen, placed this unity of all rational pursuits in the ideal of philosophy; Aristotle, on the contrary, is averse to all that is ideal; he seems to fear that the ideal, by raising extravagant pretensions in the human mind, would quickly find its refutation in the experience of reality, such as it reveals itself even in the life of the philosopher himself. It was in a similar spirit that Aristotle reproved those who decried all pleasure in a view to deter men from evil pleasures; for, he said, it is soon seen that the acts of the philosopher are not in accordance with his words, and deeds weigh more than fine discourse.<sup>14</sup> This view pervades his entire doctrine. He everywhere discovers limits and obstacles, both in nature and humanity, which he had no hopes of overcoming, for indeed such a hope was probably a stranger to all antiquity; and as his only object was to paint and to portray what was really accessible to man, he turned away from contemplating the ideal in order to represent the actual such as it appears. This opinion has naturally enough exercised a considerable influence on his view of philosophy, for it also is a work of humanity; and he therefore limits his view of it to the degree in which it is practicable by man. But having thus diverted his view from the ideal of philosophy, he necessarily saw in it nothing more than an insulated operation of the human mind, since it is only in the calm and supreme development of the reason that the harmonious unity of all its in-

<sup>14</sup> Eth. Nic. x. 1.

tellectual efforts is discernible. This idea enters deeply into his whole system, and we may track it in the accumulated distinctions which Aristotle is constantly drawing without maintaining any, or at least marked connexion between them.

This fragmentary character of Aristotle's mind is found even in the divisions of philosophy observed by him in his writings. But before we examine the latter it is necessary to indicate the general features under which the whole domain of philosophy exhibited itself to Aristotle's mind, in order that we may be able to determine in the system the relative places of the several parts. Aristotle's notion of philosophy was evolved from the form under which it is communicated; for he held it to be the characteristic distinction of science that it is teachable and learnable. Now as all instruction must set out from the previously known, there must consequently be certain grounds or principles of science which cannot themselves be regarded as objects of science, in so far, that is, as they are known previously to science.<sup>15</sup> By this Aristotle intended to signify the necessity that the two modes of scientific procedure, demonstration and induction, must have certain fixed principles from which they proceed, and which themselves cannot be subjected to any scientific procedure. Accordingly, he assumed an immediate cognition, which he distinguishes from science in the strict sense, though he

<sup>15</sup> Anal. Post. i. 1; Eth. Nic. vi. 3. *ἔτι διδακτὴ πᾶσα ἐπιστήμη δοκεῖ εἶναι, καὶ τὸ ἐπιστητὸν μαθητὸν. ἐκ προγινωσκομένων δι' πᾶσα διδασκαλία· —εἰσὶν ἄρα ἀρχαί, ἐξ ὧν ὁ συλλογισμός, ὧν οὐκ ἔστι συλλογισμός· ἐπαγωγή ἄρα.* Upon the twofold limits of science cf. Anal. Post. i. 21; 22.



calls it a certainty, and assigns it to science in a wider sense,—or rather to wisdom and to reason.<sup>16</sup> In all this it is impossible not to see that Aristotle's notion of science was drawn chiefly from a consideration of the manner in which it exhibits itself in a connected series of thought, starting from a certain immediate intuition of the reason, and that consequently he inclined to the opinion which makes science to be dependent on something different from and extrinsic to it. This, indeed, may be taken as a distinguishing feature of his mental character, in so far as it inclined to distinguish and hold separate, distinguishable but yet essentially connected elements of our thought. But great importance attaches itself hereto when we observe that, according to this conception, the grounds of science must necessarily be regarded as lying without and beyond the proper domain of scientific inquiry, and which actually, in Aristotle's development of philosophy, appear as points which require but a cursory notice. An inevitable consequence of this is, that Aristotle does not exhibit in the same clear light that Plato does, the union which subsists between philosophy and science and every vital development of reason.

<sup>16</sup> Anal. Post. i. 1. *πρὶν δ' ἐπαχθῆναι ἢ λαβεῖν συλλογισμόν τρόπον μὲν τινὰ ἴσως φατίον ἐπίστασθαι, τρόπον δ' ἄλλον οὐ.* Ib. c. 3. *ἡμεῖς δὲ φαμεν, οὔτε πᾶσαν ἐπιστήμην ἀποδεικτικὴν εἶναι, ἀλλὰ τὴν τῶν ἀμέσων ἀναπόδεικτον.* Ib. c. 32; Eth. Nic. vi. 6. *εἰσὶ δ' ἀρχαὶ τῶν ἀποδεικτῶν καὶ πάσης ἐπιστήμης—τῆς ἀρχῆς τοῦ ἐπιστητοῦ οὐτ' ἂν ἐπιστήμη εἴη, οὔτε τέχνη, οὔτε φρόνησις, τὸ μὲν γὰρ ἐπιστητὸν ἀποδεικτόν.—λείπεται νοῦν εἶναι τῶν ἀρχῶν.* Ib. c. 7. *δεῖ ἄρα τὸν σοφὸν μὴ μόνον τὰ ἐκ τῶν ἀρχῶν εἰδέναι, ἀλλὰ καὶ περὶ τὰς ἀρχὰς ἀληθεύειν, ὥστ' εἴη ἂν ἡ σοφία νοῦς καὶ ἐπιστήμη.* From this it is manifest that Aristotle's language is anything but fixed and constant.

Nevertheless, although Aristotle regarded the enchainment of the thoughts to be an essential condition of science, he did not make its distinctive character to consist in its form. For he required the same strict coherency for the domain of opinion, and consequently distinguished the conclusions which rest only on probability (which he terms dialectical) from those which follow from the fixed principles of science (*συλλογισμὸς ἀποδεικτικός*).<sup>17</sup> This distinction, he says, arises out of the difference of the objects of thought. For as there are two kinds of being, one of which cannot be otherwise than as it is, while the other differs at different times, there must be two kinds of thought likewise, to represent both that which cannot be conceived of otherwise than as it is, and that which may be conceived to be different. The former is the object-matter of science, the latter of opinion.<sup>18</sup> Agreeably to this view, he asserts that whatever is transitory and contingent can only contingently or collaterally become an object of science.<sup>19</sup> However, it would almost appear that Aristotle feared that he had thereby circumscribed too narrowly the domain of science, and that he consequently remitted something from the rigour of his own distinction. For we find that, contrary to all the principles of method, he has inserted between the opposite members of this con-

<sup>17</sup> Top. i. 1.

<sup>18</sup> Anal. Post. i. 33. ἔστι δέ τινα ἀληθῆ μὲν καὶ ὄντα, ἐνδεχόμενα δὲ καὶ ἄλλως ἔχειν. δῆλον οὖν, ὅτι περὶ μὲν ταῦτα ἐπιστήμη οὐκ ἔστιν—ἀλλὰ μὴν οὐδὲ νοῦς.—ὥστε λείπεται δόξαν εἶναι περὶ τὸ ἀληθὲς μὲν ἢ τὸ ψεῦδος, ἐνδεχόμενον δὲ καὶ ἄλλως ἔχειν· τοῦτο δ' ἔστιν ὑπόληψις τῆς ἀμείσου προτάσεως καὶ μὴ ἀναγκαίας.

<sup>19</sup> Ib. c. 7.

trariety a third, which nevertheless he does not ascribe to a particular domain intermediate to both science and opinion, but absolutely ascribes it to that of science. For instance, we constantly find him maintaining that science does not relate exclusively to the immutable and necessary, but also to that which ordinarily happens (*ὡς ἐπὶ τὸ πολὺ*).<sup>20</sup> This is evidently a lax definition of science, the cause of which may be traced in the general indecision of Aristotle. Still it may be pleaded that this arose from a desire to counteract the one-sidedness of the Platonic doctrine, by reclaiming for science some part, however small, of the large domain of becoming.

Another point, which Aristotle held to be essential to science, deserves notice in the present place. What Plato maintained merely in a subordinate sense, that science can only be conceived in a relation to the object of knowledge, Aristotle asserted unconditionally. For he argues: Science is only a science of that which is presented to it, of that which is, or of the knowable; consequently the notion of science is clearly relative.<sup>21</sup> In such a light science naturally appeared to one who looked less to the end of science than to those incomplete developments of it, which ever leave still something extrinsical to it, a something which science does not comprise within itself. But this is a narrow view of science. With wisdom and reason, the case,

<sup>20</sup> Anal. Post. i. 30; Met. xi. 8. *ἐπιστήμη μὲν γὰρ πᾶσα τοῦ ἀεὶ ὄντος ἢ ὡς ἐπὶ τὸ πολὺ, τὸ δὲ συμβεβηκὸς ἐν οὐδετέρῳ τούτων ἐστίν.*

<sup>21</sup> Top. vi. 8, 12; Cat. 7; Phys. vii. 3. *πολὸν γὰρ μάλιστα τὸ ἐπιστήμον ἐν τῷ πρὸς τι πῶς ἔχειν λέγομεν. Met. xi. 9; φαίνεται δ' ἀεὶ ἄλλου ἢ ἐπιστήμη καὶ ἡ αἴσθησις καὶ ἡ δόξα καὶ ἡ διάνοια, αὐτῆς δ' ἐν παρίργῳ.*

according to Aristotle, is different; these indeed have their end within themselves, and not in any thing without: they are cognisant of themselves, and their object is not distinct from them. Even Aristotle therefore admits of an elimination of the contrariety between science and its object, in the supreme term of rational thought, but this exists not for man, whom Aristotle scarcely encourages to hope that, contending against the hard destiny of humanity, he can ever in any degree approximate to it.<sup>22</sup>

When formerly we spoke of the fragmentary manner of Aristotle's treatises, we had chiefly in view the disposition of his works as they have come down to us, as well as the subdivisions of his respective works, which occasionally seem to be tacked together most capriciously. We are far indeed from asserting that no internal principle of connection pervades these divisions, or that the idea of a whole is not followed in the several treatises, still it cannot be denied that Aristotle's own exposition renders it difficult to trace the course of his ideas throughout. It contributes not a little to this difficulty that the results of experience are everywhere mixed up with the philosophical portions of his doctrines, so as frequently to occasion a doubt what Aristotle held to be philosophical, or what em-

<sup>22</sup> Met. i. 2. δῆλον οὖν, ὡς δι' οὐδεμίαν αὐτὴν (sc. τὴν σοφίαν) ζητοῦμεν χρεῖαν ἐτέραν, ἀλλ' ὥσπερ ἄνθρωπος, φαμέν, ἐλεύθερος ὁ αὐτοῦ ἔνεκα, καὶ μὴ ἄλλου ὧν, οὕτω καὶ αὐτὴν ὡς μόνην ἐλευθέραν οὖσαν τῶν ἐπιστημῶν· μόνη γὰρ αὕτη αὐτῆς ἔνεκὲν ἐστι. διὸ καὶ δικαίως ἂν οὐκ ἀνθρωπίνῃ νομίζοιτο αὐτῆς ἡ κτῆσις· πολλαχῇ γάρ ἡ φύσις δοῦλη τῶν ἀνθρώπων ἐστίν, ὥστε κατὰ Σιμωνίδην θεὸς ἂν μόνος τοῦτο ἔχοι τὸ γέρας, ἄνδρα δ' οὐκ ἄξιον μὴ οὐ ζητεῖν τὴν καθ' αὐτὸν ἐπιστήμην. — ἀναγκαιότεραι μὲν οὖν παύσαι ταύτης, ἀμείνων δ' οὐδεμία. 1b. xii. 9; cf. Eth. Nic. vi. 7; ap. Plut. Consol. ad Apoll. 27.

pirical. As, then, consistently with the design of our history, we have only to notice whatever is immediately of importance for the right understanding of Aristotle's philosophy, (but at the same time it must be our constant endeavour to expose it, as far as possible,) in the order which he himself gave to it, we have a difficult task to accomplish, which Aristotle himself has done little to facilitate. It will therefore be advisable for us to weigh carefully any allusions Aristotle may occasionally throw out as to the parts of philosophy, and afterwards to compare them with his general notion of philosophy as a whole.

These occasional allusions to the division of philosophy are very inconsistent. Aristotle insists, more than Plato did, upon the distinction between practical and theoretical science,<sup>23</sup> to the difference he universally draws between right acting and right thinking. On this account, the division of philosophy into practical and theoretical, has also been ascribed to him. When, however, the question is of a complete division, he adds to the two above, a poetical creative science,<sup>24</sup> as indeed he everywhere distinguishes, with Plato, between acting and creating. Now it may be urged that making or creating, as a mean merely, or machinery, of which the end and purpose is life, and therefore as belonging to mechanical activity, cannot rightly be brought into philosophy; but if, according to this objection, the division of philosophy into theoretical

<sup>23</sup> Top. vi. 8; viii. 1; Met. ii. 1; vi. 1, 2; xi. 7; de Part. An. i. 1; Eth. Nic. i. 1; Eud. i. 1, etc.

<sup>24</sup> Top. vi. 8; viii. 1; Met. vi. 1, 2.

and practical is to be ascribed to Aristotle, it must at once be admitted that he rather borrowed a division for philosophy, than drew one for it out of its inner nature. But in opposition to such a view, we find another statement, which, in express terms, ascribes to Aristotle the same division of philosophy as to Plato; viz., into logic, ethics, and physics.<sup>25</sup> If, however, it should appear desirable to reconcile this latter division with the former, we must, perhaps, assume that Aristotle regarded logic and physics as subdivisions of theoretical philosophy, while the practical comprised whatever was of an ethical character. In support of this division of theoretical philosophy into logic and physics may be urged the fact, that Aristotle divides the inquiry into Causes into three parts, of 'the unmoved,' of 'the moved but imperishable,' and of 'that which is both moved and perishable;' of which, the first is generally regarded as foreign to physics<sup>26</sup>. On the other hand, again, it is not easy to reconcile with this statement the assumption of three different species of theoretical philosophy, viz., theology, which treats of unmoved substance, mathematics, and physics.<sup>27</sup>

It appears, therefore, to be the most judicious course, to observe the ordinary division of philosophy into logic, physics, and ethics. When, however, we proceed to determine the limits of these

<sup>25</sup> Top. i. 14. *ἔστι δὲ ὡς τύπῳ περιλαβεῖν τῶν προτάσεων καὶ τῶν προβλημάτων μέρη τρία· αἱ μὲν γὰρ ἠθικαὶ προτάσεις εἰσὶν, αἱ δὲ φυσικαί, αἱ δὲ λογικαί. — πρὸς μὲν οὖν φιλοσοφίαν κατ' ἀλήθειαν περιεχόντων πραγματιῶν.* Cf. Anal. Post. 1, 33. fin.

<sup>26</sup> Phys. ii. 7; cf. de Part. An. i. 1.

<sup>27</sup> Met. vi. 1; xi. 7.

three doctrines and their mutual relations we are involved in a new difficulty. This problem proximately attaches itself to the other question, what is the relation subsisting between those speculations which the moderns have comprised under the title of metaphysics, and the other parts of philosophy. To these Aristotle gave the name of first, or prior philosophy, whereas he called physics the second, or latter philosophy.<sup>28</sup> This mode of indication denotes the high value he set upon these treatises:<sup>29</sup> still the question is open whether he thereby intended to give to them a priority in the order of teaching also.

In order to answer this question it is necessary to determine the sense in which Aristotle understood the term of first philosophy. Now, in the first place, he observes that all special branches of inquiry are engaged about some particular order of being, without, however, troubling to inquire what these things are, (*τὸ τί ἐστι*), or generally whether they are; but that they either explain them by sensation, or at once assume them as granted. But to the truly scientific mind it is of importance to know what the object of investigation is, and under what general notion it must be comprised, since without this knowledge the investigation brings nothing clearly before it. There must therefore be another science, which may take for the object of its investigation that which in other sciences is assumed;

<sup>28</sup> *πρώτη φιλοσοφία*. Phys. i. 9; de Anim. Mot. 6; *προτέρα φιλοσοφία*, de Gen. et Corr. i. 3; cf. Met. vi. 1; *δεύτερα φιλοσοφία*, Met. vii. 11.

<sup>29</sup> Met. vi. 1. αἱ μὲν οὖν θεωρητικαὶ τῶν ἄλλων ἐπιστήμων αἰρετώτεραι, αὕτη δὲ (sc. ἡ πρώτη φιλοσοφία) τῶν θεωρητικῶν. Ib. xi. 7.

and this science is the first philosophy, which occupies itself with the principles of every other science. As such it is also a science of the universal, and is conversant about the being, so far forth as being.<sup>30</sup> Against this Aristotle suggests the objection that as being may be spoken of in a variety of senses, a variety of sciences would seem to be necessary; this difficulty, however, he proceeds to remove by remarking that all the general significations of being are resolvable into a common principle, that of substance, and he accordingly looks upon the first philosophy as the science of substance.<sup>31</sup> From this it naturally follows that there are as many parts of philosophy as there are species of substance.<sup>32</sup> If there were no other substance than physical, then would physics constitute the first and only philosophy; but if there be another substance, which, existing neither in matter nor in motion, is the ground of all entity, (which he here assumes,) there must be some science prior to physics, which, as such an antecedent science, is a general science, and is occupied with the first grounds of all being.<sup>33</sup> But now the first ground or cause of all being is God, and therefore the first philosophy is

<sup>30</sup> Ll. 11.; cf. ib. iv. 1. Thus it is said, as a particular case, of the first philosophy, that its object is to investigate the principles of mathematics. Ib. iv. 3; xi. 4.

<sup>31</sup> Met. iv. 2. οὕτω δὲ καὶ τὸ δὴ λέγεται πολλαχῶς μὲν, ἀλλ' ἅπαν πρὸς μίαν ἀρχήν· τὰ μὲν γὰρ ὅτι οὐσίαι ὄντα λέγεται, τὰ δ' ὅτι πάθη οὐσίας, τὰ δ' ὅτι ὁδὸς εἰς οὐσίαν, κ. τ. λ.

<sup>32</sup> Ib. καὶ τοσαῦτα μέρη φιλοσοφίας ἔστιν, ὅσαι περ αἱ οὐσίαι.

<sup>33</sup> Ib. i.; xi. 3; 7. εἰ μὲν οὖν αἱ φυσικαὶ οὐσίαι πρῶται τῶν ὄντων εἰσὶ, καὶ ἡ φυσικὴ πρώτη τῶν ἐπιστημῶν εἴη· εἰ δ' ἔστιν ἑτέρα φύσις καὶ οὐσία χωριστὴ καὶ ἀκίνητος, ἑτέραν ἀνάγκη καὶ τὴν ἐπιστήμην αὐτῆς εἶναι καὶ προτέραν τῆς φυσικῆς καὶ καθόλου τῇ προτέραν.



named theology. It is distinct not only from physics but from mathematics also, since the latter is occupied, it is true, with that which is permanent, but not with what is separable from all matter.<sup>34</sup> By making God to be the object-matter of the first philosophy, he is far from excluding from it the consideration of all existence, so far forth as existence, but only so far forth as it is a special mode of existence; for in the ground of all existence are found all the determinations which regulate existence in general. In this respect Aristotle severely censures the earlier philosophers for having set out in their investigations with the assumption of certain determinate species of entity, without previously investigating that which is prior to all entity, namely, absolute substance itself.<sup>35</sup> The philosopher ought to inform himself of that which is the object of no special science, and as physics, mathematics, and theology, are the only theoretical sciences, it is to the last only that the investigation of generals can belong.<sup>36</sup>

If, then, we are to draw from these statements our notion of the first philosophy, we cannot doubt that with Aristotle it took the first place among the philosophical sciences. Undoubtedly it may

<sup>34</sup> L. 1. ἡ δὲ μαθηματικὴ θεωρητικὴ μὲν καὶ περὶ μένοντά τις αὕτη, ἀλλ' οὐ χωριστά.

<sup>35</sup> Met. iv. 2. καὶ οὐ ταύτῃ ἀμαρτάνουσιν οἱ περὶ αὐτῶν σκοπούμενοι ὡς οὐ φιλοσοφούντες, ἀλλ' ὅτι πρότερον ἢ οὐσία, περὶ ἧς οὐθὲν ἐπαίουσιν.

<sup>36</sup> Phys. i. 9; ii. 2. fin.; de Part. An. i. 1; Met. iv. 2. καὶ ἐστὶ τοῦ φιλοσόφου περὶ πάντων δύνασθαι θεωρεῖν. εἰ γὰρ μὴ τοῦ φιλοσόφου, τίς ἐστὶ ὁ ἐπισκεψόμενος, εἰ ταὐτὸ Σωκράτης καὶ Σωκράτης καθήμενος, ἢ εἰ ἐν ἐνὶ ἑναντίον, ἢ τί ἐστὶ τὸ ἐναντίον ἢ ποσαχῶς λέγεται; ὁμοίως δὲ καὶ περὶ τῶν ἄλλων τῶν τοιούτων. Ib. vi. 1; xi. 7. δῆλον τοίνυν, ὅτι τρία γένη τῶν θεωρητικῶν ἐπιστημῶν ἐστί, φυσικὴ, μαθηματικὴ, θεολογικὴ.

be said that, according to Aristotle, we in general ascend from individual phenomena to a knowledge of the general causes and principles, and that he makes this to be the standard method of philosophical inquiry;<sup>37</sup> and that therefore Aristotle, proceeding from the investigation of special phenomena, and less general laws, represented the more general conclusions upon entity, and the principle of nature, as the results of previous research. Nevertheless this view refers only to the method by which alone the knowledge of the scientific grounds can be attained, and not to the order of teaching. On the contrary, Aristotle insists that every scientific exposition ought to set out from general principles, and, as to make these known is the end of the first philosophy, it ought to be considered the base of all other theoretical sciences. Accordingly, the first philosophy is continually referred to in the *Physics*, and is as often called in to resolve the doubts which arise regarding the first principles of mathematics.<sup>38</sup> Indeed he expressly asserts, that it is indispensable that the naturalist should know what substance in general is, and that this can only be learned from the first philosophy.<sup>39</sup>

The high import of the first philosophy will perhaps stand out more prominently if we compare Aristotle's notion of it with what Plato called dialectic; for it is evident that these differ only in name. In the same manner that Plato insisted on the necessity of assuming some absolute unhypothetical ground of science, so Aristotle felt it to be

<sup>37</sup> *Anal. Post.* ii. 18; *de Part. An.* i. 1; *Hist. An.* i. 7.

<sup>38</sup> *Phys.* i. 2.

<sup>39</sup> *Met.* xi. 7.

indispensable to find some ultimate ground for the hypothetical grounds of special sciences; and as Plato sought this unhypothetical ground in the idea of God, and indicated true and real being as the object of dialectic, so too Aristotle is convinced that the object of the first philosophy is being, distinct from matter. To this we may further add, that with Aristotle as with Plato, the most perfect science, which presides over all others, is the science of good.<sup>40</sup> What Plato called dialectic others named logic, and even Aristotle employed the latter name in this signification,<sup>41</sup> while he applied the term dialectic to denote all reasoning which rests only on grounds of probability.<sup>42</sup>

This circumstance gives us a very different idea of that which Aristotle called logic, from what we should derive from the more common acceptation of the word. In further support of this view of the matter we shall appeal to the following considerations. On the one hand, that which is usually un-

<sup>40</sup> Met. i. 2. ἀρχικωτάτη δὲ τῶν ἐπιστημῶν καὶ μᾶλλον ἀρχικὴ τῆς ὑπερρεπούσης ἢ γνωρίζουσα, τίνος ἕνεκά ἐστι πρακτικὸν ἕκαστον· τοῦτο δ' ἐστὶ τὰγαθὸν ἐν ἐκάστοις, ὅλως δὲ τὸ ἄριστον ἐν τῇ φύσει πάση.

<sup>41</sup> De Gen. An. ii. 8. λέγω δὲ λογικὴν (ἀπόδειξιν) διὰ τοῦτο, ὅτι ὅσων καθόλου μᾶλλον, πορρωτέρω τῶν οἰκείων ἐστὶν ἀρχῶν. Eth. Eud. i. 8. ἐστὶ μὲν οὖν τὸ διασκοπεῖν περὶ ταύτης τῆς δόξης ἐτέρας τε διατριβῆς καὶ τὰ πολλὰ λογικωτέρας ἐξ ἀνάγκης· αἱ γὰρ ἀναιρετικοὶ τε καὶ κοινοὶ λόγοι κατ' οὐδεμίαν εἰσὶν ἄλλην ἐπιστήμην. Phys. iii. 5, agrees almost verbally with Met. xi. 10; here, however, occurs ἡ ζήτησις καθόλου, there λογικῶς. Cf. Met. iv. 3; vii. 4, 17.

<sup>42</sup> But here the phraseology of Aristotle appears to be unsteady, for de An. i. 1, the dialectician is opposed to the naturalist, and the distinction that is drawn is, that the latter studies the λόγος ἐν ἔλθῃ, whereas the former is only conversant about the εἶδος and the λόγος; here, too, the phrase διαλεκτικῶς καὶ κενῶς is parallel to λόγος καθόλου λίαν καὶ κίνος of the passage formerly cited from the de Gen. An. ii. 8, where the subject in hand is logical argumentation.

derstood by Aristotle's logic comprises all the matters connected with his Analytics, which forms, as it were, its nucleus ; on the other hand, the investigation into the grounds of science generally,<sup>43</sup> and then an hypothetical nature, is looked upon as the object of the first philosophy. But now Aristotle himself makes a distinction between logical and analytical grounds, which he draws from this, that the former embraces whatever is general, the latter merely the special elements of argumentation. Moreover, he assigns to logic all investigations into the immaterial entity of things (*τὸ τί ἦν εἶναι*) and into nonentity,<sup>44</sup> on which account he also classes among logical questions the examination of the ideal theory.<sup>45</sup> Lastly, to pass over other less decisive indications, when Aristotle considers the first philosophy as the ground of all other sciences, it is especially the principle of contradiction, which is the foundation of every logical procedure, that he gives out as the basis of all the investigations of the first philosophy, or as the most general principle of principles.<sup>46</sup> By thus returning to the establishing of the logical principle, Aristotle shows most distinctly, that the examination of the principles which are admitted in the Analytics, is not separate from the investigation into entity, i. e. from the first philosophy,<sup>47</sup> and that, consequently, the first

<sup>43</sup> Anal. Post. i. 22. λογικῶς μὲν οὖν ἐκ τούτων ἂν τις πιστεύσειε περὶ τοῦ λεχθέντος ἀναλυτικῶς δὲ, κ. τ. λ.

<sup>44</sup> Met. vii. 4 ; 17. φανερόν τοίνυν, ὅτι ζητεῖ τὸ αἷτιον. τοῦτο δ' ἐστὶ τὸ τί ἦν εἶναι, ὡς εἰπεῖν λογικῶς.

<sup>45</sup> Met. xiii. 5 ; Eth. Eud. i. 8.

<sup>46</sup> Met. iii. 1 ; iv. 3, 4, 6 ; xi. 5.

<sup>47</sup> Met. iii. 2. advances the question, whether there is a science to establish

philosophy affords the ground of the applicability of analytics to the sciences.

Here, however, the question naturally arises, what is the relation of the first philosophy to those writings which are usually designated as logical, and collected together under the name of *Organum*. On this point, Aristotle's intimations are too scanty for us to draw from them any decided conclusion. It would appear, however, that he regarded the Analytics as a part of logic, since he opposes the speculations, about which they are conversant, to ethics and to physics,<sup>48</sup> and in truth, as a part distinct from the first philosophy, and forming of itself a peculiar science.<sup>49</sup> Moreover, we see that Aristotle considered a knowledge of the Analytics to be essential to the right understanding of the doctrines contained in the first philosophy,<sup>50</sup> and we consequently conclude that he looked upon them as preparatory investigations, and introductory to the first philosophy. In a similar light, the *Categories* appear, which are supposed, both in the first philosophy and in the Analytics,<sup>51</sup> of which however it would seem that they ought to form a part of, or at least that they are introductory to, the former.<sup>52</sup> From these occasional hints we are

the principles of reasoning and entity. That there is such a science, appears to be implied in the investigations of the first philosophy. *Ib.* iv. 8.

<sup>48</sup> *Anal. Post.* i. 33, fin. *τὰ δὲ λοιπὰ πῶς δεῖ διανεῖμαι* —, *τὰ μὲν φυσικῆς, τὰ δὲ ἠθικῆς θεωρίας μᾶλλον ἐστίν.*

<sup>49</sup> *Anal. Post.* i. 22 ; *Met.* xi. 1.

<sup>50</sup> *Met.* iv. 3. *ὅσα δ' ἐγχειροῦσαι τῶν λεγόντων τινὲς περὶ τῆς ἀληθείας, ὅν τρόπον δεῖ ἀποδέχεσθαι, δεῖ ἀπαιδευσίαν τῶν ἀναλυτικῶν τοῦτο δρῶσι· δεῖ γὰρ περὶ τούτων ἤκειν προεπισταμένους.*

<sup>51</sup> *Anal. Post.* i. 22 ; *Met.* v. 7 ; vii. 1. *ἐν τοῖς περὶ τοῦ ποσαχῶς.*

<sup>52</sup> It is advanced, in *Met.* iv. 2, as a problem for the first philosophy, to

disposed to conclude, that with Aristotle the *Organum* and the *Metaphysics* stand in close relation to each other, the nature of which, however, is any thing but clear. On the other hand, the tradition, which is the source of the present arrangement of these works, appears wholly untenable, and we must, therefore, form for ourselves, in agreement with the co-ordination of Aristotle's own ideas, a new arrangement of that which belongs to logic. This will be the more readily permitted, the more manifest is the confusion of the books of the *Metaphysics* in their present state. And yet they form the most important element, and indeed the very end of his logic, by which name, therefore, he might well designate them peculiarly and pre-eminently.

This is further confirmed by the analogy which subsists between the first philosophy and the dialectic of Plato. For Aristotle considers the first philosophy, as Plato does the dialectic, to be philosophy absolutely. Accordingly, he distinguishes philosophy from physics, as treating of being only, so far forth, as being; whereas physics considers it so far as it participates in motion. The distinction which Aristotle draws between philosophy and mathematics, is of a similar nature.<sup>53</sup> This view is likewise the focus of all the investigations in the *Metaphysics*, the object of which is to establish the notion of wisdom or philosophy. It is clear, there-

determine the number of senses which *ἐναντίον* admits of. The principal part of the fifth book of the *Metaphysics* is taken up with the most of the *Categories*.

<sup>53</sup> Met. xi. 3, 4.

fore, that Aristotle saw something in the other parts of philosophy which was, in some degree, inconsistent with his notion of philosophy. The reason of this is easily seen. Aristotle was as strongly convinced as Plato, that physics and ethics cannot, from the nature of their objects, admit of the same precision and certainty as the first philosophy. Of ethical science he distinctly expresses his opinion, that it is not susceptible of mathematical rigour of demonstration, but that, as it is conversant about that which happen in the majority of instances and generally, its conclusions possess only a general authority,<sup>54</sup> and, on this account, it allows its reasonings to start from phenomena, and is content with the ascription of simple probability to its conclusions.<sup>55</sup> Physics are equally uncertain. For the science of whatever is composite, must necessarily be more imperfect than that of the simple, and consequently, entity in matter cannot be investigated with the same accuracy as the mathematical.<sup>56</sup> Nature is inconstant like opinion, so that in physical investigations, we must only look for probability, and not for certainty.<sup>57</sup> According to these views, then, philosophy divides itself into three parts, of which one, logic, Aristotle considers to be more philosophical, and susceptible of a more rigorous form of scientific examination

<sup>54</sup> Eth. Nic. i. 1.

<sup>55</sup> Eth. Eud. i. 6; Nic. vii. 1. *ἐὰν γὰρ λύηται τὰ δυσχερῆ καὶ καταλείπηται τὰ ἐνδοξα, δεδειγμένον ἂν εἴη ἱκανῶς.*

<sup>56</sup> Met. xiii. 3; ii. 3. *τὴν δ' ἀκριβολογίαν τὴν μαθηματικὴν οὐκ ἐν ἀπασιν ἀπαιτητέον, ἀλλ' ἐν τοῖς μὴ ἔχουσιν ὕλην· διόπερ οὐ φυσικὸς ὁ τρόπος.*

<sup>57</sup> Anal. Post. i. 33; cf. de Cælo, ii. 5, 8, 12. It is on this account, that ethics and physics depend on observation and experience. Eth. Nic. i. 2.

than the two others, ethics and physics, which do not admit of any strict demonstration.

We are, however, far from asserting that Aristotle has adopted, from the Platonic school, this division of philosophy, without considerable modification, and even doubt. He allowed it to stand as valid, in a certain degree, but still he regarded as more important, and more valid, the special subdivisions he himself has made. In his written works, and probably also in his oral lectures, he is fond of breaking up the principal questions of philosophy into several special disquisitions, which subordinate division he occasionally opposes to the higher, as in the case we have already noticed, of logic and analytics. This procedure evidently betrays a strong disposition to dissolve the organic structure of philosophy into a number of special matters, if, indeed, it is not a proof of an incapacity of combining, into a well-digested and orderly whole, the multiplicity of questions which presented themselves for his examination. The latter supposition is, perhaps, most consonant to the general character of the Aristotelian science. Its object is, rather to facilitate the review of the matter in hand, than to give shape and unity to a body of doctrine by the pervading presence of a leading idea. Accordingly, he separates the several sciences according to their principles, and wherever he meets with a science regularly developing itself out of certain principles, he does not hesitate to engraft it at once into his philosophical system. Of this we have a most decided instance in the manner in which he expresses himself on



the head of the relation of mathematics to philosophy. He divides theoretic science in general into theology, or first philosophy, mathematics, and physics; and mathematics belongs, as much as the other two, to philosophy.<sup>58</sup> In this he deviated from Plato; and, no doubt, the reasons, which led him to oppose the vague opinions of his master on the general notions of mathematics, appeared to his mind weighty and important, for they have brought him to the very verge of a shoal, which has always proved dangerous to philosophers—the determination of the relation of mathematics to philosophy. At all events, Aristotle could have had no very distinct and clear idea of philosophy, since he has made it to comprehend mathematics; and, by a natural consequence, he is at a loss when it becomes necessary to determine the essence and the philosophical import of mathematics. It has been already noticed, that one object of the first philosophy, is the derivation of the first grounds of mathematics: now physics stand in the same relation to mathematics, as these do to the first philosophy, since it is they that determine the principles of physics.<sup>59</sup> Here, then, mathematics are made distinct, as well from the first philosophy as from physics, and so stand intermediate between the two. This, however, is inconsistent with the division of philosophy into logic, physics, and ethics; and we must accordingly suppose that one part of mathematics belongs to physics, the

<sup>58</sup> Met. vi. 1. ὥστε τρεῖς ἀν εἰεν φιλοσοφίαι θεωρητικαί, μαθηματική, φυσική, θεολογική. Cf. ib. xi. 4.

<sup>59</sup> Anal. Post. i. 13.

other to logic. There are many expressions of Aristotle, which seem to favour this arrangement; for he speaks of a part of mathematics, which is rather of a physical nature, such as optics, harmonics, and astronomy;<sup>60</sup> and contrariwise of the first mathematics, which, as distinct from the mixed mathematics, and as occupied with the simple, are more rigorous in their conclusions;<sup>61</sup> and which, he even says, have for their object, not merely the unmoved, but that which is apart from all matter.<sup>62</sup> When, now, it is remembered, that to bring the immaterial to knowledge is even the problem of the first philosophy, one might perhaps feel justified in assigning to it this higher mathematical science. But, on the other hand, it must be considered, that all mathematics do not proceed from principles admitting of an universal application to science, with which, exclusively, the first philosophy has to do; and moreover, Aristotle is inconsistent in his statements upon this subject, for he elsewhere asserts, that, although this science does undoubtedly pay no attention to the sensuous qualities of things,<sup>63</sup> it, nevertheless, does not attain to non-sensuous knowledge, but that it also refers to

<sup>60</sup> Phys. ii. 2. τὰ φυσικώτερα τῶν μαθημάτων.

<sup>61</sup> Met. i. 2. αἱ γὰρ ἐξ ἐλαττόνων ἀκριβέστεραι τῶν ἐκ προσθέσεως λαμβανομένων, ὅσον ἀριθμητικὴ γεωμετρίας. Ib. iv. 2. πρώτη καὶ δευτέρα ἐπιστήμη καὶ ἄλλαι ἐφεξῆς ἐν τοῖς μαθήμασιν. Ib. vi. 1; xiii. 3.

<sup>62</sup> Met. vi. 1. ὅτι μέντοι ἔνια μαθήματα ἢ ἀκίνητα καὶ ἢ χωριστὰ θεωρεῖ, δῆλον, — τῆς δὲ μαθηματικῆς ἔνια περὶ ἀκίνητα μὲν, οὐ χωριστὰ δ' ἴσως, ἀλλ' ὡς ἐν ὕλῃ.

<sup>63</sup> Met. vi. 1; xi. 7, 3. καθάπερ δ' ὁ μαθηματικὸς περὶ τὰ ἐξ ἀφαιρέσεως τὴν θεωρίαν ποιῆται· περιελὼν γὰρ πάντα τὰ αἰσθητὰ θεωρεῖ, — μόνον δὲ καταλείπει τὸ πόσον καὶ συνεχές. Anal. Post. 1, 10; de An. i. 1; de Caelo, iii. 1.

the sensible, not indeed as sensible, but so far forth as it possesses magnitude.<sup>64</sup> On this account he asserts, in direct contradiction to what has already been noticed, that nothing mathematical is separate from matter,<sup>65</sup> and invents a peculiar term for the matter of mathematical sciences, calling it intelligible matter, in order to indicate this invariable reference of mathematics to the sensible.<sup>66</sup> But even the distinction between mathematics and physics is not rigorously observed by Aristotle. In a passage of great importance for the right understanding of his philosophy, he appeals to astronomy, as the most properly philosophical of all mathematical sciences, which, indeed, of all the branches of mathematics, alone has for its object a sensible, though eternal substance.<sup>67</sup> We must confess that, in this point, Aristotle does not faithfully adhere to his own notion of mathematics, as indeed is the case with the notion of philosophy, when he makes it comprise the mathematical sciences also.

In truth, his practice is equally discordant with

<sup>64</sup> Met. xiii. 3.

<sup>65</sup> Ib. xi. 1. χωριστὸν γὰρ αὐτῶν οὐθὲν.

<sup>66</sup> L. 1.; ib. c. 4. ἡ μαθηματικὴ δ' ἀπολαβοῦσα περὶ τι μέρος τῆς οἰκείας ὕλης ποιῖται τὴν θεωρίαν. Ib. vii. 10. ὕλη δὲ ἡ μὲν αἰσθητὴ ἐστίν, ἡ δὲ νοητὴ, αἰσθητὴ μὲν ὅλον χαλκὸς καὶ ξύλον καὶ ὅση κινητὴ ὕλη, νοητὴ δὲ ἡ ἐν τοῖς αἰσθητοῖς ὑπάρχουσα μὴ ᾗ αἰσθητὰ ὅλον τὰ μαθηματικά. This limits the assertion in Met. ii. 3, that mathematical sciences have nothing to do with any ὕλη.

<sup>67</sup> Ib. xii. 8. ἐκ τῆς οἰκειοτάτης φιλοσοφίας τῶν μαθηματικῶν ἐπιστημῶν δεῖ σκοπεῖν, ἐκ τῆς ἀστρολογίας. αὕτη γὰρ περὶ οὐσίας αἰσθητῆς μὲν, αὐτοῦ δὲ ποιῖται τὴν θεωρίαν, αἱ δ' ἄλλαι περὶ οὐδεμιᾶς οὐσίας. However, this must not be understood strictly; for else optics and harmonics must be placed along side of harmony, and the same may also be said of mechanics. Met. xiii. 2, 3; cf. Phys. ii. 2; Anal. Post. i. 13. For Aristotle says, occasionally, both more and less than he intends.

his theory. For it is evidently the object of his speculations to embrace the whole of philosophy in its widest scientific extent; and yet he has scarcely more than touched upon mathematics; and has left to more able hands the task of establishing the grounds of the very portion which he considers to be most important.<sup>68</sup> It is easy to perceive that the force of experience has overborne his incorrect view of mathematics.<sup>69</sup>

As then we find that Aristotle is not very precise in his determination of the several parts of philosophy, and as, moreover, it results from the examination of his works that he is not even faithfully observant of their respective limits, our best course, in order to give a right disposition to our examination of his philosophy, is to be guided by the intrinsic connection of his ideas. Conformably with this conclusion, we propose to leave out of consideration the mathematical sciences, except so far as they have any important reference to his philosophical researches. Accordingly, there will remain three parts of philosophy, logic, physics, and ethics, of which the last two are less strictly scientific than the first; and as to the strictly scientific portion of philosophy, not only the first philosophy belongs, but also the treatises on the form of science; under the head of logic we shall have to

<sup>68</sup> Met. xii. 8. τὸ γὰρ ἀναγκαῖον ἀφίσθαι τοῖς ἰσχυροτέροις λέγειν.

<sup>69</sup> Brandis, Heidelb. Jahrb. 1824, p. 476, confidently asserts, that Aristotle was very far from adopting the Platonic division into logic, ethics, and physics. But at all events Aristotle employs it without any attempt to overthrow it. He does not, it is true, lay great value upon it, and the mode in which he arranges his own parts, and blends mathematics with philosophy, most certainly deviated widely from the Platonic.

consider the doctrine of thought as well as that of being. In this division Aristotle agrees on the whole with Plato, and the opinions of both on the respective importance of the several parts are nearly coincident. We have already shown that the first philosophy, and consequently logic, must precede the other two; and the physics naturally follows in the next place, as the second philosophy, and as a theoretical science; and the last place will rightly fall to practical philosophy, or the philosophy of human nature,<sup>70</sup> for which Aristotle prefers the designation of politics to that of ethics.<sup>71</sup>

In determining what belongs properly to the philosophy of Aristotle, and what we may neglect as alien to it, we shall be guided by his own declared opinion, that the investigation into first principles is essential to what is truly scientific and philosophical. From the very nature of Aristotle's works it is of paramount importance to separate what belongs to experience, from what is a part of philosophy. The former, Aristotle distinguishes from perfect science, as not taking cognisance of the ground or principle, as science does: experience knows well that a thing is, not why it is. This is why the things of experience cannot be taught, since all teaching must set out from a something antecedently known, which furnishes the ground of other branches of knowledge.<sup>72</sup>

<sup>70</sup> Eth. Nic. x. 10. fin.

<sup>71</sup> Rhet. i. 2; Magn. Mor. i. 1; cf. Eth. Nic. i. 3.

<sup>72</sup> Anal. Post. i. 14. *κυριώτατον γὰρ τοῦ εἰδέναι τὸ διότι θεωρεῖν. Met. i. 1. οἱ μὲν γὰρ ἔμπειροι τὸ ὅτι μὲν ἴσασι, διότι δ' οὐκ ἴσασιν· οἱ δὲ (sc. τεχνῖται) τὸ διότι καὶ τὴν αἰτίαν γνωρίζουσι. — ὅλως δὲ σημεῖον τοῦ εἰδότος τὸ δύνασθαι διδάσκειν νομίζομεν διὰ τὴν τέχνην τῆς ἐμπειρίας ἡγούμεθα μᾶλλον ἐπιστήμην εἶναι· δύνανται γάρ, οἱ δ' οὐ δύνανται διδάσκειν.*

It is of the highest importance to bear these determinations in mind, since we frequently find that doctrines are contained in the philosophy of Aristotle which, according to his own view, cannot for a moment be regarded in the light of results of scientific inquiry. In the exposition of his scientific system, however, we shall be occasionally compelled to notice incidentally many points which properly belong to the domain of experience, because these two elements of inquiry are oftentimes so blended together by Aristotle as to make it impossible to disentangle them without violently rending the whole web of his system.

## CHAPTER III.

### THE LOGICS OF ARISTOTLE.

IN elucidating the logical doctrines of Aristotle a constant regard must be paid to the previous remarks upon the relation of the first philosophy to science and argumentation. Aristotle held that to investigate rightly the general principles of being, it is necessary to be acquainted with the nature of scientific connection.<sup>1</sup> The ground of this opinion seems to have been a conviction that to every particular act of intelligence a knowledge of the form in which it must proceed is indispensable.

In the usual arrangement of Aristotle's works the treatise on the Categories stands first of those which treat principally of the form of science. That this arrangement is not arbitrary is proved by the numerous passages in the Analytics and Metaphysics in which the Categories are referred to:<sup>2</sup> for these works throughout take for granted the reader's acquaintance with the treatise on the Categories. By this term, Aristotle understood the most extensive genera of whatever is expressed by the simple word,<sup>3</sup> under which the several kinds both

<sup>1</sup> Met. iv. 3.

<sup>2</sup> See above. In the Physics, i. 2, the investigation into the Categories is called *ἀρχὴ οἰκειοτάτη πασῶν*.

<sup>3</sup> Categ. 4. *τῶν κατὰ μηδεμίαν συμπλοκὴν λεγομένων ἕκαστον ἥτοι οὐσίαν σημαίνει, κ. τ. λ.* Phys. iii. 1. *κοινὸν δὲ ἐπὶ τούτων οὐδὲν ἔστι λαβεῖν, ὡς φαμέν, ὅ οὔτε τόδε οὔτε ποσὸν οὔτε ποιὸν οὔτε τῶν ἄλλων κατηγορημάτων οὐθὲν.*

of thought and of being are included.<sup>4</sup> Of such he enumerates ten :—essence, magnitude, quality, relation, the where, the when, position, habit, action, and passion.<sup>5</sup> For this number Aristotle does not give any reason ; he directly assumes that the categories are so many ; indeed he is far from pretending that this classification is complete, since he confesses that the same object may, under different categories, be at once a quality and a relation.<sup>6</sup> If the categories had been put forward as an accurate and exhaustive division of the modes of being, it would be open to many objections ; but Aristotle does not usually ascribe much importance to this enumeration of the most general notions, so that we may regard it as nothing more than an attempt to exhibit in a clear light the signification of words taken absolutely, in order to show how truth and falsehood consist in the right or wrong combination of these elements.<sup>7</sup> The doctrine of the Categories,

<sup>4</sup> Met. v. 7 ; ix. 10.

<sup>5</sup> Categ. 4. τῶν κατὰ μηδεμίαν συμπλοκὴν λεγομένων ἕκαστον ἥτοι οὐσίαν σημαίνει, ἢ πύσον, ἢ ποιόν, ἢ πρὸς τι, ἢ ποῦ, ἢ ποτέ, ἢ κείσθαι, ἢ ἔχειν, ἢ ποιεῖν, ἢ πάσχειν.

<sup>6</sup> Categ. 8. fin. ἔτι εἰ τυγχάνοι τὸ αὐτὸ καὶ ποιὸν καὶ πρὸς τι ὄν, οὐδὲν ἄτοπον ἐν ἀμφοτέροις αὐτὸ τοῖς γένεσι καταριθμείσθαι. Still more singular is Met. xiv. 1. καὶ πάθος, τι τοῦ ποσοῦ τὸ πρὸς τι.

<sup>7</sup> Ib. 4. fin. ἕκαστον δὲ τῶν εἰρημένων αὐτὸ μὲν καθ' αὐτὸ ἐν οὐδεμίᾳ καταφάσει λέγεται ἢ ἀποφάσει, τῇ δὲ πρὸς ἄλληλα τούτων συμπλοκῇ κατάφασις ἢ ἀπόφασις γίγνεται. Cf. Trendelenb. de Arist. Categoriais ; Berol. 1833. This treatise is an attempt to show that the first four categories remount ultimately to the 'nomen,' (substant. adjectivum, numerale,) and the last four to the 'verbum ;' the intermediate two to the 'adverbium.' This explanation may be considered as an attempt to explain the singular arrangement of the table of the categories, but it is not in the spirit of Aristotle. For it is opposed, first, by the History of Grammar, that this division of words was subsequent to Aristotle's time ; vide Classen. de Grammaticæ Græcæ primordiis, p. 54 : secondly, by the above-cited passage, (Phys. iii. 1,) where Aristotle expressly asserted that the categories cannot be reduced to any higher genus, which



consequently, is not to be looked upon as a result of a philosophical investigation; for in such a case Aristotle would most assuredly have justified the proposed division by some reason or other.

However, they exhibit to us the position which Aristotle took up in all his investigations into the nature of science. Like Plato, he looked to the manifestation of the thought by means of language; and accordingly he carries his inquiry back to the first element of language, the word. Now a word, as simple, is indifferent for truth or falsehood; and truth is only possible in a combination of words into a proposition, whether affirmative or negative.<sup>8</sup> This implies, of course, that in a representation, or a thought by itself, error is impossible; indeed, representations are, with Aristotle, merely certain impressions on the soul, which may be looked upon as resemblances of things, which, like the things themselves, are always in the same manner and relation to the same mind.<sup>9</sup> Accordingly, the re-

would not be true if Trendelenburg were right. According to his view, Aristotle could not properly have assumed more than three, or, rather, two categories, for the adverb belongs as much to the verb as the adjective to the substantive, and the ten would be subordinate to these two. Nevertheless, the traces which Trendelenburg followed are not altogether delusive. Undoubtedly, the researches which led Aristotle to the categories, set out from Plato's distinction of the *ὄνομα* and *ῥῆμα*, which he also adopted, and consequently he must have been very near to this comparison of the categories with the elements of language; but he does not appear to have followed it out far enough to arrive at any final conclusion. Much, in the system of Aristotle, stands in an imperfect shape, and the doctrine of the Categories is by no means adequately carried out and worked up into his whole theory.

<sup>8</sup> Categ. 4. τῶν δὲ κατὰ μηδεμίαν συμπλοκὴν λεγομένων οὐδὲν οὔτε ἀληθὲς οὔτε ψεῦδος ἐστίν. Met. vi. 3; ix. 10. in an objective point of view. τὸ δὲ κυριώτατα ὃν ἀληθὲς ἢ ψεῦδος. τοῦτο δ' ἐπὶ τῶν πραγμάτων ἐστὶ τὸ συγκρίσθαι ἢ διερῆσθαι.

<sup>9</sup> De Interpr. 1. ἔστι μὲν οὖν τὰ ἐν τῇ φωνῇ τῶν ἐν τῇ ψυχῇ παθημάτων

presentation of an object to the stag is as little true or false as that to a man or to a sage, since it is without any assertion of existence or non-existence.<sup>10</sup> Truth or falsehood consists, therefore, merely in a combination of words or ideas, wherein, in some manner, the thought of being or non-being is conjoined with another thought.

Hence arose the view that a true or false thought must be expressed by the union of a subject with a predicate, or by their separation. Indeed Aristotle goes so far as to maintain, that being or non-being is nothing else than the union or separation of a subject and a predicate.<sup>11</sup> It is in this sense that Aristotle investigates propositions in his treatise *De Interpretatione*. He there remounts to the elements of language, which, however, in conformity with the end in view, he considers as elements of propositions; it is not the categories, but the general term and the verb, which we there meet with.<sup>12</sup> From the combination of the two arises the proposition (*λόγος*), of which there are many species, but it is only the enunciative proposition, (*ἀποφαντικός λόγος*), that admits of our discovering in it truth or falsehood.<sup>13</sup> The simple enunciative proposition is again divided into two kinds, the affirmative and the negative,<sup>14</sup> which are mutually opposed, and give rise to contradiction so soon as they are

σύμβολα. — τὰ αὐτὰ πᾶσι παθήματα τῆς ψυχῆς καὶ ὧν ταῦτα ὁμοιώματα, πράγματα ἤδη τὰ αὐτά.

<sup>10</sup> L. 1.

<sup>11</sup> Met. ix. 10. τὸ μὲν εἶναι ἔστι τὸ συγκεῖσθαι καὶ ἐν εἶναι, τὸ δὲ μὴ εἶναι τὸ μὴ συγκεῖσθαι, ἀλλὰ πλείω εἶναι. De Interpr. 3. οὐδὲ γὰρ τὸ εἶναι ἢ μὴ εἶναι σημειῖον ἔστι τοῦ πράγματος, οὐδὲ ἰὰν τὸ ὄν εἴπῃς αὐτὸ ψιλόν· αὐτὸ μὲν γὰρ οὐδὲν ἔστιν· προσσημαίνει δὲ σύνθεσιν τινα, ἣν ἄνευ τῶν συγκειμένων οὐκ ἔστι νοῆσαι.

<sup>12</sup> De Interp. ii. 3.

<sup>13</sup> Ib. c. 4.

<sup>14</sup> Ib. c. 5.

asserted in the same sense of one and the same.<sup>15</sup> With this division of propositions there belongs also another, which refers to their universality or particularity. A general term is asserted generally, when it applies to many,—particularly, when of individuals. Here are opposed to each other as well the universal affirmative to the universal negative, as the universal affirmative and negative to the particular negative and affirmative respectively.<sup>16</sup> But the propositions which are so opposed to each other, and those also which affirm and deny the same of the same, in the same relation, cannot both be true, but one must be true, and the other false.<sup>17</sup>

This is grounded on the principle of contradiction, the highest principle on which all demonstration is founded.<sup>18</sup> Aristotle declares it to be a result of the grossest ignorance to endeavour to find a reason of this principle; nevertheless, the confutation of those who deny it, if they do not speak for simply speaking sake, is possible; for they can be driven to self-contradiction. For instance, if they argue seriously, they must admit that in whatever is said something must be meant, and that too determinately, for a word which expresses an infinite multiplicity would not be a word; now, if by the word a determinate something be expressed, it cannot also signify an indeterminate something; which conclusion, however, is equivalent to the principle

<sup>15</sup> Ib. c. 6.

<sup>16</sup> Ib. c. 7. This constitutes the difference between *ἐναντίως* and *ἀντιφατικῶς ἀντικείμεσθαι*. Cf. Anal. Pr. i. 8, 15; Met. v. 10; x. 4.

<sup>17</sup> De Interpret. 8.

<sup>18</sup> Met. iii. 1; iv. 3. φύσει γὰρ ἀρχὴ καὶ τῶν ἄλλων ἀξιωματικῶν αὐτῇ πάντων.

of contradiction—that the one cannot at the same time be the one and not the one.<sup>19</sup>

This properly establishes the principle of contradiction only for the truth of language; but with Aristotle the truth of language is invariably connected with the truth of being. On this point the system of Aristotle does not differ greatly from that of Plato, and consequently we can be brief upon it. He distinguishes two different aspects of the same theory. When, for instance, it is said, that in every respect the same is nevertheless not the same, and that not the same is yet the same, it may equally be asserted that what is asserted is false, since its contrary is equally true; but it can also be maintained that whatever is asserted is true, since it is as legitimate as its contrary. To the former modification of the doctrine Aristotle reckons the theories of Anaxagoras and Democritus, who denied that anything which is asserted of another does not really belong to it, but that its contrary is equally contained therein: whereas the theory of Heraclitus and the Pythagoreans, who maintain that all at once is, and is not, belongs to the latter.<sup>20</sup> But these two theories refute themselves, for that which says, all is true, says that the opposite view is equally true; and that which says all is false asserts its own falsehood.<sup>21</sup>

Aristotle here furnishes at the same time the re-

<sup>19</sup> Ib. iv. 4. ἀρχὴ δὲ πρὸς ἅπαντα τὰ τοιαῦτα οὐ τὸ ἀξιοῦν ἢ εἶναι τι λῆγειν ἢ μὴ εἶναι, — ἀλλὰ σημαίνειν γέ τι καὶ αὐτῷ καὶ ἄλλῳ· τοῦτο γὰρ ἀνάγκη, εἰ λέγοι τι· — ἥδη γάρ τι ἔσται ὠρισμένον. — τεθείη γὰρ ἀν' ἰδίων ὄνομα καθ' ἕκαστον τῶν λόγων. εἰ δὲ μὴ τεθείη, ἀλλ' ἄπειρα σημαίνειν φαίη, φανερόν ὅτι οὐκ ἀν' εἰς λόγος· τὸ γὰρ μὴ ἔν σημαίνειν οὐθὲν σημαίνειν ἐστί. Ib. c. 8.

<sup>20</sup> Ib. c. 7.

<sup>21</sup> Ib. c. 8.

futation of two opposite errors; of which one is founded on unlimited scepticism, and asserts the falsehood of every idea that is predicated of being; while the other dogmatically maintains the invariable truth of all thought and all entity. This scepticism Aristotle traces in most cases to the consciousness of inability to refute conflicting doubts. He attempts its refutation by considering man's position in the conduct of human affairs, where it is impossible to act upon the opinion of the equal falsehood of all things. For even although man here must determine upon the dictates of mere opinion, still those who live by opinion alone will long as earnestly after the truth as the sick man for health. In opinion the more or the less must be noted, since some opinions approach nearer and others recede nearer to the truth; if, then, this is the case, there must be a truth to which a correct opinion approaches more closely than a false one.<sup>22</sup> Another source of this scepticism he places in the sensuous presentation. For the opinion, that whatever can be conceived or thought of contains in itself the most opposite determinations, is generally derived from that other opinion that all thought and all being is something sensible. In sensation the same object appears differently to different persons; and since the sensible is susceptible of opposite changes, it has been concluded that opposites must be found in everything sensible. But nothing can be asserted

<sup>22</sup> Ib. c. 4. fin. *ἔτι εἰ ὅτι μάλιστα πάντα οὕτως ἔχει καὶ οὐχ οὕτως, ἀλλὰ τό γε μᾶλλον καὶ ἥττον ἐνεστί ἐν τῇ φύσει τῶν ὄντων· οὐ γὰρ ἂν ὁμοίως φήσαιμεν εἶναι τὰ δύο ἄρτια καὶ τὰ τρία, οὐδ' ὁμοίως διέψευσται ὁ τὰ τέτταρα πέντε οἰόμενος καὶ ὁ χίλια· εἰ οὖν μὴ ὁμοίως, δῆλον ὅτι ἄτερος ἥττον, ὥστε μᾶλλον ἀληθεύει· εἰ οὖν τὸ μᾶλλον ἐγγύτερον, εἴη γε ἂν τι ἀληθές, οὐ ἐγγύτερον τὸ μᾶλλον ἀληθές.*

with truth of that which changes in every possible sense. To this Aristotle answers by observing, in the first place, that is from a very small portion of what is sensible, those objects, viz., of the universe which most closely environ us, that this opinion has been drawn, and as these are but a very inconsiderable portion of the whole, it is impossible to draw from it any conclusion as to the whole.<sup>23</sup> This answer, however, applies only to a particular case, and accordingly Aristotle proceeds to defend the sensuous representation generally. With this view he observes, that it is not to be confounded with conception simply,<sup>24</sup> and appeals to the fact that all doubts of the credibility of sensuous perception which are drawn from the difference of sensations in sleep and awake, in sickness and in health, of near and remote objects, are forgotten in the midst of practical life. Every perception is true with respect to its proper object, and to what it immediately declares : its declarations are not opposite at one and the same time ; and when at any time it is doubtful, it does not doubt what its own state is, but what that is which corresponds to it.<sup>25</sup> This doctrine he attaches naturally enough to Plato's theory of the relativity of all sensible phenomena. In order to resolve all doubts which may be urged against truth of perception, it is sufficient

<sup>23</sup> Ib. c. 5. ἔτι δ' ἄξιον ἐπιτιμῆσαι τοῖς οὕτως ἐπιλαμβάνουσιν, ὅτι καὶ αὐτῶν τῶν αἰσθητῶν ἐπὶ τῶν ἐλαττόνων τὸν ἀριθμὸν ἰδύντες οὕτως ἔχοντα περὶ ὅλου τοῦ οὐρανοῦ ὁμοίως ἀπεφάναντο· ὁ γὰρ περὶ ἡμᾶς τοῦ αἰσθητοῦ τόπος ἐν φθορᾷ καὶ γενέσει διατελεῖ μόνος ὢν· ἀλλ' οὗτος, ὡς εἰπεῖν, οὐθεὶν μῶριον τοῦ παντός ἐστιν· ὥστε δικαιότερον ἂν εἰ' ἐκείνα τοῦτον ἀπεψηφίσαντο, ἢ διὰ ταῦτα ἐκείνων κατεψηφίσαντο.

<sup>24</sup> L. 1. ἀλλ' ἡ φαντασία οὐ ταῦτὸν τῇ αἰσθήσει.

<sup>25</sup> L. 1.; de Anima iii. 3.

to observe that every phenomenon is only such to whom it appears, and for him it has a certain truth, but not truth absolutely.<sup>26</sup> The sensible, indeed, subsists not in and for itself, but only in reference to sentient beings, and if these were not there would be nothing sensible. That therefore nothing is sensible, may be asserted with great truth, for sensible indicates nothing more than a certain state; an impression on the sentient.<sup>27</sup> This forms the principal point of Aristotle's refutation of those who dispute the validity of his principle of contradiction by an appeal to the uncertainty of sensation. For, he argues, even admitting the falsehood of sensation, still it would be impossible to deny that something, which is the cause of sensation, is the ground of phenomena, and exists as true independently of all sensation. For sensation exists not of itself, but there is something else distinct from it, which produces, and consequently is besides and prior to, sensation.<sup>28</sup> If aught perishes, there must be something subsisting; and if aught comes into existence, there must necessarily be something out of which and by which it is produced, and this supposition cannot be carried back into infinity.<sup>29</sup> Those, on the other hand, who wish to reduce every thing to sensation, make all things to be

<sup>26</sup> Met. iv. 6. τὸ γὰρ φαινόμενον τινὶ ἐστὶ φαινόμενον. — ἀλλ' ἴσως διὰ τοῦτ' ἀνάγκη λέγειν τοῖς μὴ δι' ἀπορίαν, ἀλλὰ λόγου χάριν λέγουσιν, ὅτι οὐκ ἐστὶν ἀληθὲς τοῦτο, ἀλλὰ τούτῳ ἀληθὲς.

<sup>27</sup> Ib. c. 5. ὅλως δ' εἰπερ ἐστὶ τὸ αἰσθητὸν μόνον, οὐδὲν ἂν εἴη μὴ ὄντων τῶν ἐμψύχων· αἰσθησις γὰρ οὐκ ἂν εἴη· τὸ μὲν οὖν μὴδὲ τὰ αἰσθητὰ εἶναι ἴσως ἀληθὲς· τοῦ γὰρ αἰσθανομένου πάθος τοῦτό ἐστι.

<sup>28</sup> L. 1. τὸ δὲ τὰ ὑποκείμενα μὴ εἶναι, ἀ ποιεῖ τὴν αἴσθησιν, καὶ ἄνευ αἰσθήσεως, ἀδύνατον· οὐ γὰρ δὴ ἢ γ' αἰσθησις ἑαυτῆς ἐστίν, ἀλλ' ἐστὶ τι καὶ ἕτερον παρὰ τὴν αἴσθησιν, ὃ ἀνάγκη πρότερον εἶναι τῆς αἰσθήσεως· τὸ γὰρ κινεῖν τοῦ κινουμένου φύσει πρότερόν ἐστι.

<sup>29</sup> L. 1.

nothing more than a mere relation; in opposition to which, the existence of some absolute entity must be maintained, and then it would at once be admitted that all that appears is not true.<sup>30</sup> In this respect Aristotle opposes those who would reduce all objects to mere transient relations, and insists on the necessity of admitting the existence of some primary, towards which the relation is a relation. This primary (τὸ ὑποκείμενον,) he calls substance (οὐσία,) or that which a thing is in its essence (τὸ τί ἦν εἶναι,) wherear a relation is something merely in accident (συμβεβηκός). Those who say that everything is an accident, must deny the existence of that general primary of which every accident is an accident, and must go on *ad infinitum*, attaching accident to accident. But as this is impossible, there must be a first ground and substratum of which all else is predicated.<sup>31</sup> Aristotle is of opinion that many have been seduced into unlimited doubt by an unwise demand for a reason for all things, and consequently by a refusal to acknowledge the true grounds of all science,—the essence and the definition of notions.<sup>32</sup>

On the other hand, the doctrine of the equal truth of every entity and every thought requires refutation as equally destitute of science. Among the advocates of this doctrine, he reckons, not

<sup>30</sup> Ib. c. 6. εἰ δὲ μὴ ἔστι πάντα πρὸς τι, ἀλλ' ἐνιά ἔστι καὶ αὐτὰ καθ' αὐτά, οὐκ ἂν εἴη πᾶν τὸ φαινόμενον ἀληθές.

<sup>31</sup> Ib. c. 4. ὅλως δ' ἀναιροῦσιν οἱ τοῦτο λέγοντες οὐσίαν καὶ τὸ τί ἦν εἶναι· πάντα γὰρ ἀνάγκη συμβεβηκέναι φάσκειν αὐτοῖς. — εἰ δὲ πάντα κατὰ συμβεβηκός λέγεται, οὐθὲν ἔστιαι πρῶτον τὸ καθόλου, εἰ αἰὶ τὸ συμβεβηκός καθ' ὑποκειμένου τινὸς σημαίνει τὴν κατηγορίαν· ἀνάγκη ἄρα εἰς ἄπειρον ἵεναι, ἀλλ' ἀδύνατον· — τὸ γὰρ συμβεβηκός οὐ συμβεβηκότη συμβεβηκός.

<sup>32</sup> Ib. c. 6, 7. ἀρχὴ δὲ πρὸς ἅπαντας τούτους ἐξ ὀρισμοῦ, κ. τ. λ.; ib. c. 8.



only Heraclitus, but the Eleatæ also, since they agree in identifying all things, and consequently, maintaining that every thing, even opposites, may be predicated of one and the same object.<sup>33</sup> Against this view, Aristotle employs the arguments of Plato, giving to them, however, a different form, and application more conformable with the Categories.<sup>34</sup> If all be notionally the same, all distinction would cease between good and evil, and between one and other, and it would consequently follow, that those who avowedly spoke of one, would in fact speak of nothing.<sup>35</sup> Here then, again, he insists on the position, that whatever can be an object of language, or of teaching, must be a determinate object, and, as such, distinct from all others. To this position he attaches the refutation of the other principle of the Eleatic school, that all is in rest. The method of this refutation is very simple. If all were constantly in repose, the same would be always either true or false; but it is obvious that a proposition may at one time be true, and at another false, for the person who speaks, did not, at some time past, speak, and again, at some future time, will not speak.<sup>36</sup> Even those who teach that all is one and unmoved, are compelled to admit either that

<sup>33</sup> Phys. i. 2; Met. iv. 4. *ἔτι εἰ ἀληθεῖς αἱ ἀντιφάσεις ἅμα κατὰ τοῦ αὐτοῦ πᾶσαι, δῆλον ὡς ἅπαντα ἔσται ἓν.* Ib. c. 5. *καίτοι συμβαίνει γε τοῖς ἅμα φάσκουσιν εἶναι καὶ μὴ εἶναι, ἡρεμεῖν μᾶλλον φάναι ἢ κινεῖσθαι πάντα· οὐ γὰρ ἔστιν εἰς ὃ τι μεταβάλλει· ἅπαντα γὰρ ὑπάρχει πᾶσι.*

<sup>34</sup> Phys. i. 1.

<sup>35</sup> L. 1. *καὶ οὐ περὶ τοῦ ἓν εἶναι τὰ ὄντα ὁ λόγος ἔσται αὐτοῖς, ἀλλὰ περὶ τοῦ μὴθίν.* Met. iv. 4. *το ἀόριστον οὖν ἰοικασί λέγειν καὶ οἰόμενοι λέγειν τὸ ὄν περὶ τοῦ μὴ ὄντος λέγουσι.*

<sup>36</sup> Met. iv. 8. *εἰ μὲν γὰρ ἡρεμεῖ πάντα, αἰεὶ ταῦτά ἀληθῆ καὶ ψευδῆ ἔσται· φαίνεται δὲ τοῦτο μεταβάλλον· ὁ γὰρ λέγων ποτὲ αὐτὸς οὐκ ἦν καὶ πάλιν οὐκ ἔσται.*

there is such a thing as a false opinion, or else, that there is only one opinion or conception; but in this concession, they admit the existence of motion, for opinion and conception are nothing more than species of motion.<sup>37</sup> In this manner did Aristotle, in his refutation of these extreme doctrines, appeal to simple facts, which even his opponents were constrained to admit.

It was of importance to demonstrate the mutability of that which may be asserted as truth, in order to establish the possibility of speaking of contingent truths. Herein, again, the investigations into the forms of being are mixed up with those into the form of thought. For a difficulty arises if we extend the principle of contradiction to future things which only appear as contingent, since we should render every thing necessary, and entirely eliminate the possible if we should pretend that every affirmation or negation concerning future things is either true or false. To say that any matter will happen, is, indeed, either true or false; but it is only when the event has taken place, that it can be true. If it be true to say so at the present time, the event must be necessary, and, if necessary, its contrary is impossible, and there is nothing in it which can be regarded as merely contingent or possible.<sup>38</sup> On the other hand, he taught that, in the case of things which either are not always, or simply are not, both affirmative and negative propositions may be true.

<sup>37</sup> Phys. viii. 3. εἴπερ οὖν ἔστι δόξα ψευδὴς ἢ ὅλως δόξα, καὶ κινήσεις ἔστι, καὶ εἰ φαντασία, καὶ ὅτε μὲν οὕτως δοκῇ εἶναι, ὅτε δ' ἐτέρως· ἡ γὰρ φαντασία καὶ ἡ δόξα κινήσεις τινὲς δοκοῦσιν εἶναι.

<sup>38</sup> De Interpr. 12.

Of such things, indeed, it is true to say, that an entity is when it is, and of a non-entity, that it is not when it is not; but that it is not possible to say simply that every thing, that is, is necessarily, and that what is not, necessarily is not, although it is perfectly competent to say of the necessary that it either is, or is not.<sup>39</sup> Aristotle avowedly shows that there is a difference between possible and false, since a matter may be false without therefore being impossible,<sup>40</sup> and that, that only is impossible, the contrary of which is necessarily true. On the other hand, a matter is possible, when it does not necessarily follow that its contrary should be false.<sup>41</sup> He rightly remarks, that the opposite doctrine, which the Megarians adopted, would necessarily get rid of all motion, for if there can only be a possible where there is also an actual, in that case, whatever has not come to pass, would be without power to come to pass, and, consequently, could not come into being, but all would remain in its existing state.<sup>42</sup>

By these investigations Aristotle opened a way for his theory of propositions, which declare a thing to be possible or impossible, necessary or otherwise. For possible-to-be is not contradicted by possible-to-be-not, but by not-possible-to-be. This he clearly deduces, by showing that, in the proposition which treats of the possible, the words to be, do not belong to the predicate, but to the subject, and that possible is the predicate.<sup>43</sup> And,

<sup>39</sup> L. l.

<sup>40</sup> De Cælo, i. 12; Met. ix. 4. οὐ γὰρ δὴ ἴσται ταὐτὸ το ψεύδος καὶ τὸ ἀδύνατον· τὸ γὰρ σε ἰστάναι νῦν ψεύδος μέν, οὐκ ἀδύνατον δέ.

<sup>41</sup> Met. v. 12.

<sup>42</sup> Ib. ix. 3.

<sup>43</sup> De Interpr. 12. ἴσθιν ἄρα ἀπόφασις τοῦ δυνατὸν εἶναι τὸ μὴ δυνατόν

as the contrary of possible is the impossible, and as that which is impossible, necessarily is not, the same laws apply to propositions concerning the impossible as those of the necessary. Impossible-to-be and impossible-not-to-be are not contradictories, but the contrary of the former is not-impossible-to-be, and, in the same manner, the necessary-to-be and the necessary-not-to-be do not constitute a contradiction, but necessary-to-be and not-necessary-to-be.<sup>44</sup> But again, Aristotle restricts this contrariety of the necessary and the possible, and argues that, as the necessary is opposed to the impossible, it must itself be possible.<sup>45</sup> But if now it be assumed, that all that is necessary is also possible, a new difficulty arises out of the previous explanation of the propositions concerning the possible. For it was said that, if it be possible for a particular thing to be, it would also be possible for it not to be. It would therefore follow, that, if the necessary is also always possible, that every possible and every necessary matter cannot be, which, however, contradicts directly the notion of necessity. To get out of this difficulty a distinction is necessary. Possible admits of being taken in a double signification; in one, it denotes that which either is immovable and unchangeable, or which is either always, or now, at least, in motion to a fixed direction; in the other sense it denotes, that which may be moved in directly opposite directions. Now it is

*εἶναι, ἀλλ' οὐ τὸ δυνατόν μὴ εἶναι. — γίνεται γάρ, ὥσπερ ἐπ' ἐκείνων τὸ εἶναι καὶ τὸ μὴ εἶναι προσθέσεις, τὰ δ' ὑποκείμενα πράγματα τὸ μὲν λευκόν, τὸ δ' ἄνθρωπος, οὕτως ἐνταῦθα τὸ μὲν εἶναι καὶ τὸ μὴ εἶναι ὡς ὑποκείμενον γίνεται, τὸ δὲ δύνασθαι καὶ προσδέχεσθαι προσθέσεις διορίζουσαι, ὥσπερ ἐπ' ἐκείνων τὸ εἶναι καὶ τὸ μὴ εἶναι.*

<sup>44</sup> Ibid.

<sup>45</sup> Ibid. c. 13.

only of the latter that the assertion holds good that it is possible both to be and not to be, and it, therefore, cannot be identified with the necessary, but the former can.<sup>46</sup> From this it also follows, that whatever is necessary is also in actuality, or in act, but not so whatever is merely possible.<sup>47</sup>

These investigations into the nature of propositions serve for the base of his theory of reasoning as exposed in his *Analytics*.<sup>48</sup> A perfect argumentation he defines to be a discourse, in which, from a particular position, some necessary conclusion is drawn, distinct from the position itself, and without employing any idea not contained in the position itself.<sup>49</sup> In the next place, he proceeds to determine the various forms in which the argument is legitimate. With this view, he explains in what manner the change or conversion of a proposition is possible or not: he then analyses the different figures of the syllogism, and the mode in which one figure may be reduced to another by converting the propositions.<sup>50</sup> We do not consider it necessary to enter, at great length, into this part of Aristotle's system, partly because it must be well known to every one who knows anything of

<sup>46</sup> L. 1. τὸ γὰρ δυνατόν οὐχ ἀπλῶς λέγεται, ἀλλὰ τὸ μὲν, ὅτι ἀληθὲς ὡς ἐνερλεία ὄν, ὅλον δυνατόν βαδίζειν, ὅτι βαδίζει, καὶ ὅλως δυνατόν εἶναι, ὅτι ἤδη ἔστι κατὰ ἐνέργειαν, ὃ λέγεται εἶναι δυνατόν· τὸ δὲ, ὅτι ἐνεργήσειεν ἄν. — καὶ αὕτη μὲν ἐπὶ τοῖς κινητοῖς μόνοις ἐστὶν ἡ δύναμις, ἐκείνη δὲ καὶ ἐπὶ τοῖς ἀκινήτοις. — τὸ μὲν οὖν οὕτω δυνατόν οὐκ ἀληθὲς κατὰ τοῦ ἀναγκαίου ἀπλῶς εἰπεῖν, θάτερον δὲ ἀληθές. Met. v. 12; ix. 2; Anal. Pr. i. 13.

<sup>47</sup> De Interpr. l. 1. φανερόν δὲ ἐκ τῶν εἰρημένων, ὅτι τὸ ἐξ ἀνάγκης ὄν κατ' ἐνέργειάν ἐστιν. — τὰ δὲ οὐδέποτε ἐνέργειαι εἰσὶ, ἀλλὰ δυνάμεις μόνον.

<sup>48</sup> That he was the original author of these doctrines would appear to follow, from Soph. El. 33.

<sup>49</sup> Anal. Pr. *ibid*.

<sup>50</sup> Ib. i. 2. 7.

scientific exposition, and partly because it enters too much into merely external matters, such as the mere verbal expression, while the thought remains unchanged through every possible change in the form of the proposition and the syllogism. We shall confine ourselves to the remark, that Aristotle confines himself to establishing the actual laws, without attempting to develop, even briefly, the results which may be deduced from them. As the first originator of these theories he cannot justly be reproached for this. He only notices the so-called categorical syllogism,<sup>51</sup> and knows no more than the first three figures of it.<sup>52</sup> In modern times, a disposition has occasionally been evinced to make Aristotle's philosophical merits to consist principally in the development he has given to the theory of the syllogism, and this merit has often been unduly exaggerated, from ignorance of what he really accomplished. When, however, it is considered that this theory does not, and from its nature could not, enter deeply into the development of philosophical ideas, the merits of Aristotle, in this respect, must be rated very low. They consist, in general, in the manner

<sup>51</sup> Tennemann, in his *History of Philosophy*, iii. p. 78, n., thinks that hypothetical syllogisms are mentioned in *Anal. Pr. i. 22*, under which he probably comprised the disjunctive also. But the *συλλογισμὸς ἐξ ὑποθέσεως* here mentioned, is very different from the modern hypothetical argument. What Aristotle understood by *ὑπόθεσις* may be seen from *Anal. Post. i. 2. θέσεως δ' ἣ μὲν ὁποτέρου τῶν μορίων τῆς ἀποφάνσεως λαμβάνουσα—ὑπόθεσις*. Cf. *Anal. Pr. i. 30*; *Top. i. 18*. F. J. Chr. Francke de sensu proprio, quo Aristoteles usus est in iis argumentandi modis, qui recedunt ab ejus perfecta syllogismi forma. Rost. 1824, p. 4 sq. Theophrastus is said to have been the first to write briefly on hypothetical syllogisms, who was followed by Eudemus in a longer but unsatisfactory treatise. Boeth. de Syll. Hypoth. in p. 606, ed. Bas. 1570.

<sup>52</sup> This indeed must be imputed to Aristotle as a fault, since, in *Anal. Pr. i. 23*, he attempts to show that, in these three figures only, can a right conclusion be drawn.

in which he has investigated, however imperfectly, the facts relatively to the language of reasoning, with a view to draw a general estimate of the value of the syllogism for the exposition of philosophy. With this design, the *Analytics* were composed, which he considers necessary to be known prior to any discussion upon the general grounds of science,<sup>53</sup> for even the examination of the syllogism shows how the more general principles of science must be gained.

From the examination of the three figures of the syllogism, Aristotle concluded that the first only is a perfect syllogism, i. e., one which is at once both universal and affirmative, and that the two others may be reduced to the first. From this he draws the observation, that it is extremely difficult to establish a universal by the syllogism, because this can only be done in the first figure, whereas its refutation is possible by any of the three figures.<sup>54</sup> Moreover, he does not omit to enumerate all the general notions and propositions by which the conclusion may be drawn.<sup>55</sup> But what he regards as the most important point throughout these investigations, is to determine the mode in which the conclusion is formed, and how it may be found. With this view he distinguishes three species of entity or being, one of which cannot be predicated of any other, a second may be predicated of some other, which, however, cannot be predicated of it, whereas the third can be both predicated of other, and other of it.<sup>56</sup> By the first, he under-

<sup>53</sup> *Met.* iv. 3.<sup>55</sup> *Anal. Pr.* i. 23, 25.<sup>54</sup> *Anal. Pr.* i. 26.<sup>56</sup> *Ib.* c. 21, 27.

stood all individuals as apprehended by the senses, or as contained in the very lowest genera; by the second the highest genera,<sup>57</sup> but by the third, the genera intermediate to the highest and the lowest. This view is based upon the opinion which the historical development of Greek philosophy may have helped to impress upon Aristotle's mind, that viz., no investigation into science can be carried on unto infinity, since the infinite eludes cognition.<sup>58</sup> Accordingly, Aristotle supposes that the conclusion which is drawn from ultimate and most general principles, must be final, since otherwise nothing could be proved if further proofs could be demanded without end.<sup>59</sup> In the same manner, there must be an ultimate descending limit, in order that argument may be limited on this side likewise; from which it follows that science, which stands between the two, must be limited and determinate.<sup>60</sup> From this it is clear that the method of deduction has its limits; for, of the highest genera, no conclusion can be drawn, since no other higher idea can be predicated of them, while the lowest cannot be concluded of aught, since they cannot be predicated of aught else. Consequently, it is only about the middle genera that the demonstrative process of the syllogism proceeds with unlimited freedom.<sup>61</sup> In this procedure the essential point is, that we

<sup>57</sup> L. l. ὅτι μὲν οὖν ἐν τῶν ὄντων κατ' οὐδενὸς πίπτει λέγεσθαι, δῆλον. τῶν γὰρ αἰσθητῶν σχεδὸν ἕκαστόν ἐστι τοιοῦτον, ὥστε μὴ κατηγορεῖσθαι κατὰ μηδενός, πλὴν ὡς κατὰ συμβεβηκός· — ὅτι δὲ καὶ ἐπὶ τὸ ἄνω πορευομένοις ἴσταται ποτε, πάλιν ἐροῦμεν.

<sup>58</sup> Anal. Post. i. 22. τὰ δ' ἀπείρα οὐκ ἐστι διεξελεθῆν νοοῦντα.

<sup>59</sup> Met. iv. 4. ὅλως μὲν γὰρ ἀπάντων ἀδύνατον ἀπόδειξιν εἶναι· εἰς ἀπειρον γὰρ ἂν βαδίζοι, ὥστε μὴδ' οὕτως εἶναι ἀπόδειξιν.

<sup>60</sup> Anal. Post. i. 19—23.

<sup>61</sup> Anal. Pr. i. 27.



should always be ready to find, in the wide domain of general notions, those which admit or not of being predicated of others. In this, experience is very serviceable, and it is experience alone that enables us to draw any conclusions concerning that which is.<sup>62</sup> Consequently, the question, how we are able to gain an acquaintance with these ideas, and to determine their mutual dependence, appeared to Aristotle, as well as to Plato, to be of the highest importance. In the solution of this question, however, he has differed materially from his master, as the position which we have just quoted clearly proves.

Plato, as we showed in our exposition of his theory, regarded ideas as originally subsisting in the human mind, and taught that the remembrance of them is awakened by means of sensation. It also appeared that he found it difficult to give to this representation a strictly scientific shape, and that, on this account, the doctrine of the mediation of the ideas by sensation presents itself in his system as a vague and undecided opinion. As such it is attacked by Aristotle. He is dissatisfied with the arguments in the *Meno*;<sup>63</sup> and he considers it especially absurd to maintain that we knew not that we did know—for to this amounts the assertion that we possessed within us the ideas, without, however, knowing that we did possess them.<sup>64</sup> He is also dissatisfied with Plato's method of assuming

<sup>62</sup> Anal. Pr. i. 30. *διο τὰς μὲν ἀρχὰς τὰς περὶ ἕκαστον ἐμπειρίας ἵστί παραδοῦναι* — ὁμοίως δὲ καὶ περὶ ἄλλην ὁποιανοῦν ἔχει τέχνην τε καὶ πίστιμήν, ὥστ' ἰὰν ληθῇ τὰ ὑπάρχοντα περὶ ἕκαστον, ἡμέτερον ἤδη τὰς ἀποδείξεις ἐτοίμως ἐμφανίζειν.

<sup>63</sup> Anal. Pr. ii. 21; Anal. Post. i. 1.

<sup>64</sup> Anal. Post. ii. 18.

what requires to be demonstrated,<sup>65</sup> and as devoid of that necessary connection and logical deduction which is requisite for the legitimisation of ideas.<sup>66</sup> Accordingly, he proposes to substitute for it another method, which may determine from experience every notion in its necessary co-ordination and dependence on the others. This he called the syllogism of induction. In this argument, it is shown, by means of all lower and contained notions, that a particular notion must be ascribed to the higher and containing notion, because it is shown to belong to all the lower.<sup>67</sup> The inductive syllogism is opposed to the demonstrative, inasmuch as, proceeding from the lower notion, it shows that the middle one belongs to the higher, whereas the latter proceeds from the middle notion, and thereby connects the lower with the higher.<sup>68</sup> These two alone, according to Aristotle, are strictly scientific procedures.<sup>69</sup> The relation subsisting between the two must be learned from an examination of his view of the form of science.

All instruction and all learning must, he says, rest upon some antecedent conviction; this is manifest both in induction and in demonstration, for the latter sets out from some general and admitted principle, and the former arrives at its conclusion from a consideration of particulars already

<sup>65</sup> Anal. Pr. i. 31. ἔστι γὰρ ἡ διαίρεσις οἷον ἀσθενὴς συλλογισμός· οὐ μὲν γὰρ δεῖ δεῖξαι, αἰτεῖται.

<sup>66</sup> Anal. Post. ii. 5.

<sup>67</sup> Anal. Pr. ii. 23. ἐπαγωγή μὲν οὖν ἐστὶ καὶ ὁ ἐξ ἐπαγωγῆς συλλογισμός τὸ διὰ τοῦ ἐτέρου θάτερον ἄκρον συλλογίσασθαι. — δεῖ δὲ νοεῖν τὸ γ' ἐξ ἀπάντων τῶν καθέκαστον συγκειμένων ἢ γὰρ ἐπαγωγή διὰ πάντων.

<sup>68</sup> L. 1.

<sup>69</sup> L. 1. ἅπαντα γὰρ πιστεύομεν ἢ διὰ συλλογισμοῦ ἢ ἐξ ἐπαγωγῆς.

known.<sup>70</sup> The two methods, therefore, set out from opposite points, and arrive at opposite results. Now the general principle, which is the basis of all demonstrative reasoning, in itself and in its nature is better known; but the particulars from which the inductive proceeds are the better known to us.<sup>71</sup> This distinction between the more known in itself, and the more known to us, is of great importance for the right understanding of Aristotle's philosophy. The latter is whatever is more nearly allied to sensation, and is relative to the particular, whereas that which is better known according to its nature or in itself, and in the idea, is more remote from sensation, and constitutes the general.<sup>72</sup> For we do not believe that we have rightly understood any matter until we can, by a syllogistic argument, demonstrate its cause, and point out its necessity from some more general principle. The syllogism is therefore the form of all proper science,<sup>73</sup> and as this proceeds invariably from the general, the general must in its nature be better known than the particular, which derives its first legitimisation from the general.<sup>74</sup>

<sup>70</sup> Anal. Post. i. 1. *πᾶσα διδασκαλία καὶ πᾶσα μάθησις διανοητικὴ ἐκ προϋπαρχούσης γίγνεται γνώσεως*—ὁμοίως δὲ καὶ περὶ τοὺς λόγους, οἳ τε διὰ συλλογισμῶν καὶ οἳ δι' ἐπαγωγῆς· ἀμφότεροι γὰρ διὰ προγιγνωσκομένων ποιοῦνται τὴν διδασκαλίαν, οἱ μὲν λαμβάνοντες ὡς παρὰ ξυνιέντων, οἱ δὲ δεικνύντες τὸ καθόλου διὰ τοῦ δῆλον εἶναι τὸ καθέκαστον.

<sup>71</sup> An. Pr. ii. 23. *φύσει μὲν οὖν πρότερος καὶ γνωριμώτερος ὁ διὰ τοῦ μέσου συλλογισμός, ἡμῖν δ' ἐναργέστερος ὁ διὰ τῆς ἐπαγωγῆς.*

<sup>72</sup> Anal. Post. i. 2. *λίγω δὲ πρὸς ἡμᾶς μὲν πρότερα καὶ γνωριμώτερα τὰ ἐγγύτερον τῆς αἰσθήσεως, ἀπλῶς δὲ πρότερα καὶ γνωριμώτερα τὰ πορρώτερον· ἔστι δὲ πορρώτάτω μὲν τὰ καθόλου μάλιστα, ἐγγυτάτω δὲ τὰ καθέκαστα.* Top. vi. 4; de An. ii. 2. *κατὰ τὸν λόγον γνωριμώτερον.*

<sup>73</sup> Anal. Post. ii. 5. *οὐδ' ὁ ἐπάγων ἀποδείκνυσιν.*—οὐδὲ γὰρ ὁ ἐπάγων ἴσως ἀποδείκνυσιν, ἀλλ' ὅμως δηλοῖ τι.

<sup>74</sup> Anal. Post. i. 1. *ἐπίστασθαι δ' οἰόμεθα ἕκαστον ἀπλῶς,*—ὅταν τὴν

That, therefore, which is better known to us, is of less value than the known in itself; nevertheless, although it partakes less of entity, we must set out from it in order to arrive at a knowledge of the true, in the same manner as in practice we proceed from that which is good for us specially, to that which is absolutely good.<sup>75</sup> The better known to us is the sensible, which in and for itself is nothing, and exists only in relation to the sentient; consequently, sensuous perception cannot give certain knowledge, since it only shows us what is present here or there, and in this or that particular state, whereas the general holds not merely for a given time or place, but for all times and places.<sup>76</sup> It is clear, therefore, that Aristotle traces the origin of all our knowledge to sensuous perception, which, however, he regards as the ground of a higher knowledge, which does not confine itself to phenomena, but acquaints us with their non-sensuous principles, of which the intellect alone is cognisable. It is on this ground that he declares it to be the natural method of all investigation, to collect, first of all, a history of facts or particulars, and afterwards, out of these to educe the general causes of all things and all actions.<sup>77</sup> The same thought, with how-

τ' αἰτίαν οἰόμεθα γινώσκειν, δι' ἣν τὸ πρᾶγμα ἔστιν, ὅτι ἐκείνου αἰτία ἴστί καὶ μὴ ἐνδέχεσθαι τοῦτ' ἄλλως ἔχειν.—φαμέν δὲ καὶ δι' ἀποδείξεως εἰδέναι, ἀπόδειξιν δὲ λέγω συλλογισμὸν ἐπιστημονικόν. Met. i. 2.

<sup>75</sup> Met. vii. 4.

<sup>76</sup> Anal. Post. i. 31. τὸ δὲ καθόλου καὶ ἐπὶ πᾶσιν ἀδύνατον αἰσθάνεσθαι· οὐ γὰρ τότε, οὐδὲ νῦν· οὐ γὰρ ἂν ἦν καθόλου· τὸ γὰρ αἰεὶ καὶ πανταχοῦ καθόλου φαμέν εἶναι· ἐπεὶ οὖν αἱ μὲν ἀποδείξεις καθόλου, ταῦτα δ' οὐκ ἔστιν αἰσθάνεσθαι, φάνερρον ὅτι οὐδὲ ἐπίστασθαι δι' αἰσθήσεως ἔστιν.

<sup>77</sup> Anal. Post. i. 13, 27, 31. τὸ γὰρ καθόλου τίμιον, ὅτι δηλοῖ τὸ αἴτιον. De Histor. An. i. 6. ἵνα πρῶτον τὰς ὑπαρχούσας διαφορὰς καὶ τὰ συμβεβη-

ever a slight modification, is expressed in the demand he makes that the different elements, which are combined together in sensible phenomena, and which constitute, as it were, a general, which comprises these several elements, must be separated and distinguished, in order that we may arrive at a knowledge of the elements and grounds of the sensible.<sup>78</sup>

The difficulty of this doctrine is principally felt in its attempt to determine more closely in what way the higher scientific knowledge is formed out of this lower cognition of sensuous perception. Generally, indeed, it is obvious that Aristotle sets out from the view which Plato established, viz. that perception, or the sensuous presentation, and whatever belongs to its domain, must be distinguished from the rational thought or understanding.<sup>79</sup> This,

κότα πᾶσι λαμβάνωμεν· μετὰ δὲ τοῦτο τὰς αἰτίας τούτων πειρατέον εὐρεῖν· οὕτω γὰρ κατὰ φύσιν ἐστὶ ποιῆσθαι τὴν μέθοδον ὑπαρχούσης τῆς ἱστορίας τῆς περὶ ἕκαστον, περὶ ὧν τε γὰρ καὶ ἐξ ὧν εἶναι δεῖ τὴν ἀπόδειξιν, ἐκ τούτων γίνεται φανερόν. De Part. An. i. 1; Eth. Nic. i. 2.

<sup>78</sup> Phys. i. 1. ἔστι δ' ἡμῖν πρῶτον δῆλα καὶ σαφὴ τὰ συγκεχυμένα μᾶλλον, ὕστερον δ' ἐκ τούτων γίνεται γνῶριμα τὰ στοιχεῖα καὶ αἱ ἀρχαὶ διαιρουσί ταῦτα· διὸ ἐκ τῶν καθόλου ἐπὶ τὰ καθέκαστα δεῖ προῖναι· τὸ γὰρ ὅλον κατὰ τὴν αἴσθησιν γνωριμώτερον· τὸ δὲ καθόλου ὅλον τί ἐστι· πολλὰ γὰρ περιλαμβάνει ὡς μέρη τὸ καθόλου. By 'general,' nothing more is here signified than the whole of a sensuous representation, a mode of expression which Aristotle does not indeed frequently employ, but in general the terminology of Aristotle is far from consistent; see Trendelenburg in Arist. de Anima, p. 338, sq.

<sup>79</sup> Aristotle, as well as Plato, frequently interchanges the terms νοῦς and διάνοια as identical, e. g. de An. iii. 4; but occasionally, it must be confessed, he does make a distinction between them. Met. vi. 3. τὸ ψεύδος καὶ τὸ ἀληθές — ἐν διανοίᾳ. περὶ δὲ τὰ ἀπλᾶ καὶ τὰ τί ἐστιν οὐδ' ἐν τῇ διανοίᾳ: but in νοῦς expressly. But this passage is also in another sense inconsistent with Aristotle's phraseology. See Biese, d. Philos. d. Arist. i. p. 327. n. 4. Consequently the difference between διάνοια and νοῦς is the same as that between ἐπιστήμη and νοῦς. See below.

to his mind, was proved physically by the difference between man and beast, and logically by the existence of error. For the senses do not deceive us : every sensation expresses the passion and motion which is operated in and on the soul ; if, then, there were nothing else in us but sensation, error would be impossible : the origin of error is in the use of the understanding, which may be right or wrong.<sup>80</sup> He also agrees with Plato as to the cause of this distinction, that, viz. sensation is only motion, whereas there is also a stable and quiescent something in our thoughts ; for science is but the completion of the thought wherein the end of investigation has been attained, and the soul is at rest. Man does not arrive at understanding until the unsteady flux of sensation, which exists in the child, has ceased within his soul.<sup>81</sup> Moreover, Aristotle adopts the distinction which Plato drew between sensuous being, and that which is merely intellectually knowable. The latter he makes to be alone properly being, and the object of science absolute being, whereas the sensible is merely a contingent phenomenon, of which it may truly be said

<sup>80</sup> De An. ii. 5. ἡ δ' αἴσθησις ἐν τῷ κινεῖσθαι τε καὶ πάσχειν συμβαίνει. De Sensu 6 ; Met. iv. 5 ; de An. iii. 3. ἡ μὲν γὰρ αἴσθησις τῶν ἰδίων δεῖ ἀληθής. — ἡ αἴσθησις τῶν μὲν ἰδίων ἀληθής ἐστὶν ἡ δὲ ὀλίγιστον ἔχουσα τὸ ψεῦδος. This restriction is singular, but perfectly Aristotelian. — πάντες γὰρ οὗτοι τὸ νοεῖν σωματικὸν ὥσπερ τὸ αἰσθάνεσθαι ὑπολαμβάνουσιν. — καίτοι ἔδει ἅμα καὶ περὶ τοῦ ἠπατῆσθαι αὐτοὺς λῆγειν. — ὅτι μὲν οὖν οὐ ταῦτόν ἐστι τὸ αἰσθάνεσθαι καὶ τὸ φρονεῖν, φανερόν· τοῦ μὲν γὰρ πᾶσι μί- τεστι, τοῦ δὲ ὀλίγοις τῶν ζώων· ἀλλ' οὐδὲ τὸ νοεῖν, ἐν ᾧ ἐστὶ τὸ ὀρθῶς καὶ τὸ μὴ ὀρθῶς.

<sup>81</sup> Phys. vii. 3. τῷ γὰρ ἡρεμῆσαι καὶ στῆναι τὴν διάνοιαν ἐπίστασθαι καὶ φρονεῖν λέγομεν, κ. τ. λ. Eth. Nic. vi. 12 ; Probl. xx. 14 ; de An. i. 3. ἔτι δ' ἡ νόησις εἰκὼν ἡρεμήσει τινὶ καὶ ἐπιστάσει μᾶλλον ἢ κινήσει.

that it would not be at all but for the sentient soul.<sup>82</sup> The manner, however, in which Aristotle reconciled the two, and the mutual relation he ascribed to them, are questions which can only be answered after a closer and more particular inquiry.

Even upon the most superficial review of Aristotle's expressions upon this point, one cannot fail to observe that he is not disposed to open as wide a chasm between the senses or the sensible, and the understanding or the objects of intellectual cognition as Plato does, who, at times, seems to regard the sensible as directly foreign to intelligence. On this point Aristotle differs from his master as widely as it is possible for two men to differ, who agree in making the understanding to be the source of science, and in considering the supra-sensible, and not the sensible, to be its object. As Plato occasionally appears to recommend us to get rid of the sensible, so Aristotle at times would appear to make sense and understanding to merge into each other. As instances of this disposition we may reckon all those passages where he speaks of sensuous science,<sup>83</sup> and makes distinction to be the work of sensation,<sup>84</sup> or, at least, acknowledges a sensation of good and evil, and of the just and the unjust.<sup>85</sup> In

<sup>82</sup> Magn. Mor. i. 34. ἕτερον δὲ ἐστὶ τὸ νοητὸν καὶ τὸ αἰσθητὸν ταῦτα δὲ ψυχῇ γνωρίζομεν ἕτερον ἂν εἴη τὸ μόριον τὸ περὶ αἰσθητὰ καὶ τὰ νοητά. — ὁ δὲ νοῦς ἐστὶ περὶ τὰς ἀρχὰς τῶν νοητῶν καὶ τῶν ὄντων. De An. iii. 4, 8; Met. iv. 6. τὸ μὲν οὖν μὴδὲ τὰ αἰσθητὰ εἶναι ἴσως ἀληθές. Top. i. 17. ἐπιστητὸν and νοητὸν are the same thing. Ib. ii. 3.

<sup>83</sup> Eth. Nic. vii. 5.

<sup>84</sup> Met. i. 1; de An. iii. 2.

<sup>85</sup> Pol. i. 2. τοῦτο γὰρ πρὸς τὰλλα ζῶα τοῖς ἀνθρώποις ἴδιον, τὸ μόνον ἀγαθοῦ καὶ κακοῦ, καὶ δίκαιον καὶ ἀδίκου καὶ τῶν ἄλλων αἰσθησιν ἔχειν.

this direction, indeed, Aristotle goes so far at times as even to term a certain class or species of sensation, science simply, or reason.<sup>86</sup> But in order to understand rightly these expressions of Aristotle, it must be borne in mind that he employs the word sensation both in a wider and a narrower sense. For instance, he distinguishes three species of sensations: that which is the object of a single sense, a particular phenomenon; that of the senses collectively, viz. the general classes of phenomena in space and time; and thirdly, that which is the basis of, and which produces the sensuous perception—the sentient or individual man. This is accompanied with the remark that it is only the first two that can properly be said to be perceived by the senses, whereas the individual sentient is only relatively and indirectly an object of perception.<sup>87</sup> And, in fact, whatever is indirectly perceived is the proper object of intellectual cognition, so that, according to this explanation, the notions of the in-

Eth. Nic. iv. 11. In the passage of the Magn. Mor. i. 35, the reading varies between λόγος τῶν αἰσθητῶν, which Bekker adopts, and λόγος αἰσθητός, which is in nowise un-Aristotelian. The perception of the λόγος is, however, different from the having it. Pol. i. 5.

<sup>86</sup> Eth. Nic. vi. 12. ἐκ τῶν καθέκαστα καὶ τὸ καθόλου. τούτων οὖν ἔχειν δεῖ αἰσθῆσιν αὐτῇ δ' ἐστὶ νοῦς. διὸ καὶ φυσικὰ δοκεῖ εἶναι ταῦτα. Elsewhere Aristotle accurately distinguishes between the higher faculties of the νοῦς and φρόνησις and the physical, but not so rigorously as invariably to observe it. Probl. xxx. 1.

<sup>87</sup> De An. ii. 6. λέγεται δὲ τὸ αἰσθητὸν τριχῶς, ὡν δύο μὲν καθ' αὐτὰ φαμεν αἰσθάνεσθαι, τὸ δὲ ἓν κατὰ συμβεβηκός. τῶν δὲ δύο τὸ μὲν ἰδίον ἐστὶν ἐκάστης αἰσθήσεως, τὸ δὲ κοινὸν πασῶν. — κατὰ συμβεβηκός δὲ λέγεται αἰσθητὸν, ὅσον εἰ τὸ λευκὸν εἴη διάρους νόος κατὰ συμβεβηκός γὰρ τούτων αἰσθάνεται, ὅτι τῷ λευκῷ συμβέβηκε τοῦτο, οὐ αἰσθάνεται. — τῶν δὲ καθ' αὐτὰ αἰσθητῶν τὰ ἴδια κυρίως ἐστὶν αἰσθητά. Ib. iii. 3; Anal. Post. ii. 19. καὶ γὰρ αἰσθάνεται μὲν τὸ καθέκαστον, ἡ δ' αἰσθησις τοῦ καθόλου ἐστίν. Met. iv. 5. fin.



tellectually cognisable and the mediately sensible are coincident.

From this, however, it is plain that Aristotle considered all intellectual knowledge and sensuous perception to be intimately allied to each other. That of which the understanding alone is cognisant does not exist in and by itself absolutely, but only in the sensible ; accordingly, it is only in the sensible that it can be known, and without sensation no one would be in a condition to know anything.<sup>88</sup> The understanding would be unable to gain a knowledge of outward objects, if they were not first of all revealed to it by the senses.<sup>89</sup> Aristotle, indeed, goes still further, and holds it to be unquestionable, that the loss of a sense inevitably entails the loss of a species of science.<sup>90</sup> From this it would follow, in general, that every operation of the understanding must be combined with a corresponding operation of the senses. However, in stating this doctrine he expressly ascribes to the sensuous faculty, not merely the primary impression on the senses, but all the representations of imagination and the memory ; for both these are motions of the soul which had their origin in some previous sensation.<sup>91</sup> Without an image of the imagination the soul cannot think ; and even if we would form

<sup>88</sup> De An. iii. 8. ἔπει δὲ οὐδὲ πρᾶγμα οὐθὲν ἔστι παρὰ τὰ μεγέθη, ὥς δοκεῖ, τὰ αἰσθητὰ κεχωρισμένον, ἐν τοῖς εἶδεσι τοῖς αἰσθητοῖς τὰ νοητὰ ἔστι, τὰ τε ἐν ἀφαιρέσει λεγόμενα καὶ ὅσα τῶν αἰσθητῶν ἕξεις καὶ πάθη. καὶ διὰ τοῦτο οὔτε μὴ αἰσθανόμενος μηθὲν οὐθὲν ἂν μάθοι οὐδὲ ξυνείη.

<sup>89</sup> De Sensu 6. οὐδὲ νοεῖ ὁ νοῦς τὰ ἐκτὸς μὴ μετ' αἰσθήσεως ὄντα.

<sup>90</sup> An. Post. i. 18. φανερόν δὲ καὶ ὅτι εἰ τις αἰσθησις ἐκλείπειν, ἀνάγκη καὶ ἐπιστήμην τινὰ ἐκλείπειναι.

<sup>91</sup> De An. iii. 3 ; de Mem. i.

a merely general conception, devoid of any definite magnitude, nevertheless a definite image is invariably present before our minds.<sup>92</sup> The sensuous presentation is therefore a necessary condition of all rational intelligence, to which it must moreover be prior in time. For we have already seen that Aristotle considers the understanding to be the late product of a mature age, and it is from this point of view that he most usually and in detail describes the relation of the sensuous faculty to the understanding. He shows that a particular sensation is first produced within us, out of which a certain sensuous state arises (*αἰσθημα*), and then the permanence of the sensuous representation on the memory. From memory arises distinction, and lastly, by frequent repetition, experience, which now first opens the way to art and science, and to wisdom, or the knowledge of principles.<sup>93</sup>

By such statements too many have been misled

<sup>92</sup> De An. iii. 7. τῇ δὲ διανοητικῇ ψυχῇ τὰ φαντάσματα ὡς αἰσθήματα ὑπάρχει. — διὸ οὐδέποτε νοεῖ ἄνευ φαντάσματος ἢ ψυχῇ. De Mem. 1. συμβαίνει γὰρ τὸ αὐτὸ πάθος ἐν τῷ νοεῖν, ὅπερ καὶ ἐν τῷ διαγράφειν· ἐκεῖ τε γὰρ οὐθὲν προσχρῶμενοι τῷ τὸ ποσὸν ὠρισμένον εἶναι τὸ τριγώνου, ὅμως γράφομεν ὠρισμένον κατὰ τὸ ποσόν. καὶ ὁ νοῦν ὡσαύτως, κὰν μὴ ποσὸν νοῦν, τίθεται πρὸ ὁμμάτων ποσόν, νοεῖ δ' οὐχ ἢ ποσόν.

<sup>93</sup> Met. i. 1. φύσει μὲν οὖν αἰσθησιν ἔχοντα γίγνεται τὰ ζῶα· ἐκ δὲ ταύτης τοῖς μὲν αὐτῶν οὐκ ἐγγίγνεται μνήμη, τοῖς δ' ἐγγίγνεται. — γίγνεται δ' ἐκ τῆς μνήμης ἐμπειρία τοῖς ἀνθρώποις· αἱ γὰρ πολλαὶ μνήμαι τοῦ αὐτοῦ πράγματος μιᾷ ἐμπειρίας δύνανται ἀποτελοῦσιν. — γίγνεται δὲ τέχνη, ὅταν ἐκ πολλῶν τῆς ἐμπειρίας ἐκνοημάτων μία καθόλου γένηται περὶ τῶν ὁμοίων ὑπόληψις. Anal. Post. ii. 19. ἐκ μὲν οὖν αἰσθήσεως γίνεται μνήμη, ὡς περὶ λέγομεν, ἐκ δὲ μνήμης πολλάκις τοῦ αὐτοῦ γινομένης ἐμπειρία· αἱ γὰρ πολλαὶ μνήμαι τῷ ἀριθμῷ ἐμπειρία μία ἐστίν· ἐκ δ' ἐμπειρίας ἡ ἐκ παντὸς ἡρεμήσαντος τοῦ καθόλου ἐν τῇ ψυχῇ, τοῦ ἐνὸς παρὰ τὰ πολλά, ὃ ἀν' ἐκείνους ἐν ἐνῇ ἐκείνοισι τὸ αὐτό, τέχνης ἀρχὴ καὶ ἐπιστήμη. The expression ἐν παρὰ πολλὰ is remarkable, for Aristotle usually employs it to indicate the Platonic theory of ideas. Anal. Post. i. 11.

into the opinion that Aristotle intended to derive all scientific knowledge from the senses, and those faculties which in memory and experience naturally grow out of the sensuous perception. But the case was not so. On the contrary, he makes memory to be perfectly distinct from intellectual thought; it is not by the latter that we remember, but by the common type which was created by sensation, and is within us.<sup>94</sup> Memory is nothing more than a motion in the soul, not a rest and a permanence of the same nature as science.<sup>95</sup> Even experience is very different from science, for the former only knows that a fact is so or so, not why it is.<sup>96</sup> Compared with the men of science, the men of experience are so low in Aristotle's estimation, that he compares them to lifeless instruments, which effect a work without knowing what it is they are accomplishing.<sup>97</sup> He therefore evidently supposes a faculty of the understanding which, while it naturally indeed attaches itself to experience, nevertheless is not effected by it, and out of which science results. This he is wont to intimate by drawing a distinction between experience and the eye which we acquire

<sup>94</sup> De Mem. 1. *ἡ δὲ μνήμη, καὶ ἡ τῶν νοητῶν, οὐκ ἄνεν φαντάσματός ἐστιν ὥστε τοῦ νοουμένου κατὰ συμβεβηκός ἂν εἴη, καθ' αὐτὸ δὲ τοῦ πρώτου αἰσθητικοῦ.* De An. iii. 5.

<sup>95</sup> De Mem. 1.

<sup>96</sup> Met. 1. 1. *οἱ μὲν γὰρ ἔμπειροι τὸ ὅτι μὲν ἴσασιν, διότι δ' οὐκ ἴσασιν.*

<sup>97</sup> Ib. This comparison of the men of experience to those who act rightly merely from habit, is of importance. This touches upon his moral theory, which, however, we can here only so far notice, that the dominant view in Aristotle's ethical and scientific theories is the same, that, namely, the scientific insight must be added to natural habit before we can attain to the stable end of all our thought and our moral endeavours. The physical is nothing more than the necessary preparation of the νοῦς.

by it,<sup>98</sup> and by refusing to admit that we know by seeing, and maintaining that by seeing we merely arrive at a knowledge of the universal, for with the act of vision the idea of the universal is contemporaneously formed.<sup>99</sup> Whatever belongs either immediately or mediately to the senses, depends upon the external excitement; not so, however, the conception of the general, for this is in a certain manner in the soul itself.<sup>100</sup> And in its general features this view of Aristotle is further expressed in the relation which he supposes to exist between the rational part of the soul and the sensible. The sensible element of the soul stands in the same relation to the reason as the body does to the soul; the former is the passive, the latter the active portion; the latter is to be governed, the former is to govern;<sup>101</sup> consequently, it is impossible that the rational thought can be dependent upon the senses. On the contrary, he represents it as impassive, and existing without any bodily form, and separate from all that is corporeal.<sup>102</sup> Nevertheless, even

<sup>98</sup> Eth. Nic. vi. 12. διὰ γὰρ τοῦ ἔχειν ἐκ τῆς ἐμπειρίας ὄμμα ὁρῶσι τὰς ἀρχάς.

<sup>99</sup> An. Post. i. 31. οὐ μὴν ἀλλὰ ἐκ τοῦ θεωρεῖν τοῦτο πολλάκις συμβαῖνον τὸ καθόλου ἀν' θηρεύσαντες ἀπόδειξιν εἶχομεν. — ἔνια γὰρ εἰ ἰωρῶμεν, οὐκ ἀνεζητοῦμεν, οὐχ ὥς εἰδότες τῷ ὁρᾶν, ἀλλ' ὥς ἔχοντες τὸ καθόλου ἐκ τοῦ ὁρᾶν ὅλον εἰ τὴν ὕελον τετυρημένην ἰωρῶμεν καὶ τὸ φῶς διῶν, δῆλον ἀν' ἡν καὶ διὰ τί καί τι τῷ ὁρᾶν μὲν χωρὶς ἐφ' ἐκάστης, νοῆσαι δ' ἅμα, ὅτι ἐπὶ πασῶν οὕτως.

<sup>100</sup> De An. ii. 5.

<sup>101</sup> Pol. i. 5. ἐν οἷς φανερόν ἐστιν, ὅτι κατὰ φύσιν καὶ συμφέρον τὸ ἀρχεσθαι τῷ σώματι ὑπὸ τῆς ψυχῆς καὶ τῷ παθητικῷ μορίῳ ὑπὸ τοῦ νοῦ καὶ τοῦ μορίου τοῦ λόγον ἔχοντος.

<sup>102</sup> De An. iii. 4. ἀπαθὲς ἄρα δεῖ εἶναι, δεκτικὸν δὲ τοῦ εἶδους. — ἀνάγκη ἄρα, ἐπεὶ πάντα νοεῖ, ἀμιγῆ εἶναι, ὥσπερ φησὶν Ἀναξαγόρας, ἵνα κρατῇ, τοῦτο δ' ἐστὶν ἵνα γνωρίζῃ. — διὸ οὐδὲ μίχθαι εὐλογον αὐτὸν τῷ σώματι. — τὸ μὲν γὰρ αἰσθητικὸν οὐκ ἄνευ σώματος, ὃ ἐξ χωριστός.

while Aristotle thus exalts the reason, he is cautious not to fall into the errors of Plato. The reason in the All is incomposite and impassible, but not in individual beings and in their souls. In these reason is of gradual growth, and passes from a potential state into actuality: there is therefore a passivity even in the reason, since in the individual it is an effect and a result. The reason may, it is true, be called the seat of ideas; still in the individual it only exists potentially; and the reason of the soul is in reality nought until it becomes conscious of itself; it may be compared to a writing tablet, on which as yet nothing has been inscribed.<sup>103</sup> Before the sense of this illustration can be rightly ascertained, it is necessary to determine by what means thought becomes, as it were, written in the understanding; or, by what means the virtual of understanding arrives at actuality? Now the answer which Aristotle gives to this question is not such as would be expected by those who interpret his doctrine in a sensual spirit: for he does not teach that sensation re-forms the understanding and leads it to actual thought, but distinguishing an active and passive intellect, he makes the latter to be a mere faculty of thinking, which is awakened by the former into actual thought.<sup>104</sup> The active

<sup>103</sup> L. l. ὁ ἄρα καλούμενος τῆς ψυχῆς νοῦς — οὐθέν ἐστιν ἐνεργεία τῶν ὄντων πρὶν νοεῖν. — καὶ εὖ δὴ οἱ λέγοντες τὴν ψυχὴν εἶναι τόπον εἰδῶν, πλὴν ὅτι οὔτε ὅλη, ἀλλ' ἡ νοητικὴ, οὔτε ἐντελεχεία, ἀλλὰ δυνάμει τὰ εἶδη. — δεῖ δ' οὕτως ὥσπερ ἐν γραμματείῳ, ὃ μὴθὲν ὑπάρχει ἐντελεχεία γεγραμμένον.

<sup>104</sup> Ib. c. 5. ἰκεῖ δ' ὥσπερ ἐν ἀπάσῃ τῇ φύσει ἐστὶ τι τὸ μὲν ἕλην ἐκάστω γίνεσθαι (τοῦτο δὲ ὁ πάντα δυνάμει ἐκείνα), ἕτερον δὲ τὸ αἴτιον καὶ ποιητικὸν τῷ ποιεῖν πάντα, οἷον ἡ τέχνη πρὸς τὴν ἕλην πέπονθεν, ἀνάγκη καὶ ἐν τῇ

intellect, therefore, of the man enlightens the passive, and out of it there subsequently arises in the soul actual science, as a later effect. It is separate from all that is corporeal, it is passionless and in-composite, and subsists essentially as an eternal activity. In the All, indeed, it is the eternal science, for the active intellect does not think occasionally only, but always; in the individual, on the contrary, it is only out of the potential that the actual science, 'which is like to things,' arises. Now as this active intellect is eternal, and immutably active, and does not belong exclusively to the individual, Aristotle must have understood by it the divine reason; and in this respect his doctrine greatly resembles that of Plato, that the human mind can only attain to true science through God, and by seeing in God. This affinity of his views with those of his master, is directly admitted by Aristotle, since he subjoins to the statement of his own doctrine a refutation of all those elements in the Platonic view which were foreign to it, in order that the two might not be considered absolutely similar. With this view he observes, that although we enjoy our knowledge of things through the divine intelligence, that nevertheless this is not effected by any *anamnesis* of the divine ideas, for the divine intellect is impassive.<sup>105</sup> In further agreement with

ψυχῇ ὑπάρχειν ταύτας τὰς διαφοράς. καὶ ἔστιν ὁ μὲν τοιοῦτος νοῦς τῷ πάντα γίνεσθαι, ὁ δὲ τῷ πάντα ποιεῖν, ὡς ἕξιν τις οἶον τὸ φῶς.

<sup>105</sup> L. 1. καὶ οὗτος ὁ νοῦς χωριστὸς καὶ ἀπαθὴς καὶ ἀμιγρὴς τῇ οὐσίᾳ ὡν ἐνεργεία. αἰεὶ γὰρ τιμιώτερον τὸ ποιοῦν τοῦ πάσχοντος καὶ ἡ ἀρχὴ τῆς ἔλξης. τὸ δ' αὐτὸ ἔστιν ἡ κατ' ἐνέργειαν ἐπιστήμη τῷ πράγματι· ἡ δὲ κατὰ δύνάμιν χρόνῳ προτέρα ἐν τῷ ἐνί, ὅλως δὲ οὐ χρόνῳ· ἀλλ' οὐχ ὅτ' αὐτὸ μὲν νοεῖ, ὅτ' δ' οὐ νοεῖ. χωρισθεὶς δ' ἐστὶ μόνον τοῦθ' ὕπερ ἐστί, καὶ τοῦτο μό-

this doctrine he also teaches that the reason, which is extrinsecal to the corporeal faculties, and is alone divine, enters from without into the man.<sup>106</sup>

A comparison of the Aristotelian and Platonic doctrines, in this respect, shows that they coincided in one essential point, and in another widely differed. Both regarded the cognition of the supra-sensible to be an operation which cannot be accomplished simply by the sensuous impression, but to be a manifestation of the free and universal energy of the reason. They both agreed also in the supposition of a certain natural connection between the sensuous perception and the supra-sensuous cognition by the reason; this connection, however, Aristotle made to be much stricter and closer than Plato did. The latter was convinced that by the stimulus afforded by a single idea, a man may arrive at a knowledge of all ideas, in consequence of the necessary connection which subsists between them. Aristotle, on the other hand, maintained that completeness of knowledge can only be acquired by completeness of experience. He therefore held, that every single idea or notion is awakened in us by a particular sensation, and that

*νον αθάνατον καὶ αἰδιον. οὐ μνημονεύομεν δέ, ὅτι τοῦτο μὲν ἀπαθείς. ὁ δὲ παθητικὸς νοῦς φθαρτός, καὶ ἀνευ τούτου οὐθὲν νοεῖ. The latter is generally explained wrongly. Ib. c. 7. τὸ δ' αὐτό ἐστι ἡ κατ' ἐνέργειαν ἐπιστήμη τῷ πράγματι. ἡ δὲ κατὰ δύναμιν προτέρα ἐν τῷ ἐνί, ὅπως δὲ οὐδὲ χρόνῳ ἐστι γὰρ ἐξ ἐντελεχείας ὄντος πάντα τὰ γιγνόμενα. Met. xii. 7; Eth. Eud. vii. 15. τὸ δὲ ζητούμενον τοῦτ' ἐστι, τίς ἡ τῆς κινήσεως ἀρχὴ ἐν τῇ ψυχῇ. δηλον δὲ ὥσπερ ἐν τῷ ὅλῳ θεός, καὶ πᾶν ἐκείνῳ. κινεῖ γὰρ πως πάντα τὸ ἐν ἡμῖν θεῖον, λόγου δ' ἀρχὴ οὐ λόγος, ἀλλὰ τι κρεῖττον. τί οὖν ἀν κρεῖττον καὶ ἐπιστήμης εἶποι (l. εἴη) πλὴν θεός;*

<sup>106</sup> De Gen. An. ii. 3. λείπεται δὲ τὸν νοῦν μόνον θύραθεν ἐπεισέναι καὶ θεῖον εἶναι μόνον· οὐθὲν γὰρ αὐτοῦ τῇ ἐνέργειᾳ κοινωνεῖ σωματικὴ ἐνέργεια. Ib. c. 6.

it is only upon a comparison of the similar and dissimilar, as exhibited in phenomena, that difference results;<sup>107</sup> and, on this point, the objections which he advances against the Platonic investigation into ideas, that, for the most part, neglecting facts, and looking to a few details, it judges over-hastily of the universal,<sup>108</sup> are particularly instructive. On this account, Aristotle holds induction to be the only solid basis of science; it alone is the primary source of those higher principles, upon which the scientific method of demonstration rests. It is somewhat singular that he did not here observe how, according to this explanation, the formation of science resembles the argument in a circle, which he elsewhere rejects as invalid,<sup>109</sup> since it is from the lower notions that the higher are obtained by induction, and yet the higher ideas are again made to legitimate the lower. We should therefore have to impute to Aristotle an incredible negligence, did we not feel obliged to suppose that he had assumed that, in both proceedings, the activity of the intellect supplies the defect of the proof. The same must be supposed when we find him requiring a complete induction, and yet rejecting the method of division, notwithstanding that a complete induction is either impossible, or else is only attainable by complete divisions. But it is evident, that Aristotle's description of the method of science is as defective as Plato's; but

<sup>107</sup> Anal. Post. ii. 13, 14.

<sup>108</sup> De Gen. et Corr. i. 2. οἱ δ' ἐκ τῶν πολλῶν λόγων ἀθεώρητοι τῶν ὑπαρχόντων ὄντες πρὸς ὀλίγα ἐπιβλέψαντες ἀποφαίνονται ῥᾶον.

<sup>109</sup> Anal. Post. i. 3.



that the defects are very opposite in kind. The latter was led away by a devotion to the highest ideas, which are ever floating before us, as the ideal objects of our designs and creations, while the former loved rather to adhere steadily to the existing and the actual as being alone the true.

Aristotle's inclination to refer all knowledge to experience naturally gave rise to the view that there are several grounds of science. These grounds or principles are known by the intellect,<sup>110</sup> and they consist as well in the highest notions as in the very lowest, of which, as apprehended immediately by the intellect, no further explication can be given.<sup>111</sup> With respect to them, error is impossible, except it be in their relations respectively. We may, or may not, receive certain ideas, but any error concerning them is impossible, since this only arises in propositions wherein several notions are joined together.<sup>112</sup> On this account Aristotle rejects as idle the attempt to give a proof of, or to render an account of, any notion; and he expressly observes, that the Platonic method of divisions arose out of the false view that it is possible to demonstrate the

<sup>110</sup> Eth. Nic. vi. 6. νοῦν εἶναι τῶν ἀρχῶν.

<sup>111</sup> Anal. Post. i. 3. καὶ οὐ μόνον ἐπιστήμην, ἀλλὰ καὶ ἀρχὴν ἐπιστήμης εἶναι τινὰ φαμεν, ἣ τοὺς ὅρους γνωρίζομεν. Eth. Nic. vi. 9. ὁ μὲν γὰρ νοῦς τῶν ὄρων, ὧν οὐκ ἔστι λόγος. Ib. 12. καὶ γὰρ τῶν πρώτων ὄρων καὶ τῶν ἐσχάτων νοῦς ἔστι. Met. iii. 3. τὰ ἐσχάτα κατηγορούμενα ἐπὶ τῶν ἀτόμων.

<sup>112</sup> Met. ix. 10. τὸ μὲν θίγειν καὶ φάναι ἀληθές· οὐ γὰρ ταῦτ' ἀτάφαις καὶ φάσις. τὸ δ' ἀγνοεῖν μὴ θιγγάνειν· ἀπατηθῆναι γὰρ περὶ τὸ τί ἐστιν οὐκ ἔστιν ἀλλ' ἢ κατὰ συμβεβηκός· ὁμοίως δὲ καὶ περὶ τὰς ἀσυνθέτους οὐσίας. De An. iii. 6. ὁ δὲ νοῦς οὐ πᾶς, ἀλλ' ὁ τοῦ τί ἐστι κατὰ τὸ τί ἦν εἶναι ἀληθής, καὶ οὐ τί κατὰ τινος. Anal. Post. i. 10. τοὺς δ' ὅρους μόνον ξυνίσθαι δεῖ. Ib. ii. 8.

validity of an idea.<sup>113</sup> It is with these as with the principle of contradiction; all that can be shown is, that all contrary assumptions are false. It is clear that, according to these views, the ideas and the principles of science ought to stand separately and independent of each other. Connected herewith is the position that the syllogism is the only form of science. For, from the form of science, Aristotle shows that a single ground or principle of science is impossible, but that, necessarily, the grounds of science must be supposed to be many, and independent: for, he argues, the syllogism necessarily sets out from a single ground, and treating of a second, of which, ultimately a third something is proved.<sup>114</sup> According to this, we must distinguish two kinds of grounds, those out of which, and those of which, the proof is made. The former are universal grounds, but the latter belong, without exception, to special sciences.<sup>115</sup> For every science treats of a particular object, and is occupied with that particular class of being as its proper ground;<sup>116</sup> and every science must draw its proofs from its particular class, and not borrow them from another.<sup>117</sup> Now it follows from this, that there must be several grounds of

<sup>113</sup> Met. vi. 1; xi. 7; Anal. Pr. i. 31; Anal. Post. ii. 7—10, 14; Top. vii. 3, sq.

<sup>114</sup> Anal. Post. i. 8. ἀλλ' οὐθὲν ἤτρον τῇ γε φύσει τρία ταῦτά ἐστι, περὶ ὅ τε δείκνυσσι καὶ ἀ δείκνυσσι καὶ ἐξ ὧν. Ib. c. 32; Met. iii. 2. ἀνάγκη γὰρ ἐκ τινων εἶναι καὶ περὶ τι καὶ τινῶν τὴν ἀπόδειξιν.

<sup>115</sup> Anal. Post. i. 32. αἱ γὰρ ἀρχαὶ διτταί, ἐξ ὧν τε καὶ περὶ ὅ· αἱ μὲν οὖν ἐξ ὧν κοιναί, αἱ δὲ περὶ ὅ ἰδίαι.

<sup>116</sup> Met. vi. 1; xi. 7. ἐκάστη γὰρ τούτων περιγραφάμενη τι γένος αὐτῇ περὶ τοῦτο πραγματεύεται ὡς ὑπάρχον καὶ ὄν. Anal. Post. i. 7.

<sup>117</sup> Anal. Post. i. 7.



science; but, besides this, Aristotle supposes that there are several axioms or universal grounds of all sciences.<sup>118</sup> It is by these universal grounds, that the single sciences are connected together and related to each other, while the difference between them consists in their peculiar ground, or in their respective species; there is, however, one supreme science which investigates the grounds of all others.<sup>119</sup> It is somewhat singular that Aristotle, even while he concedes the mutual connection of all sciences, should nevertheless deny to the supreme science the power of investigating their special grounds. He has, consequently, dissolved the unity of science into a multiplicity of sciences, of which each has its independent grounding; and, at the same time, he keeps the several parts of science unduly apart. This dismemberment of science, however, must be looked upon as an inevitable result of his disinclination for the method of divisions.

In the same manner that Aristotle thus distinguishes the grounds of science and the several sciences, in consequence of his belief that science is the result of the demonstrative syllogism, he denies the name of science to intellectual thought, and distinguishes the certainly knowable (*ἐπιστητόν*) from that which is cognizable by the intellect (*νοητόν*).<sup>120</sup> This distinction, however, does not lead to any further consequences in the system of Aristotle, since, as he held that the immediate cognition of

<sup>118</sup> Ibid. c. 10; and elsewhere.

<sup>119</sup> L. 1.; Top. i. 2; Met. vi. 1; xi. 7.

<sup>120</sup> Anal. Post. ii. 19; Eth. Nic. vi. 6.

the intellect does not require any proof, its value is necessarily equal to that of a demonstrative science. This is implied in the fact, that he comprises both science and intellect under the common name of wisdom.<sup>121</sup>

These researches into the form of science and the grounds on which it rests, clearly prove that Aristotle does not, as is commonly believed, in any way conceive the doctrine of the form of thought to be independent of that concerning the form of the entity, such as it is represented by the thought. This to our minds is most clearly seen from the fact, that, following Socrates and Plato, he asserted that the form of the notion exhibits that which aught is, (*τὸ τί ἐστὶ, τὸ τί ἦν εἶναι,*) and, therefore, maintained that error and demonstration are alike impossible in the case of the essence.<sup>122</sup> This is the common ground of Plato and Aristotle in all their investigations into the nature of being, and hence it is that Aristotle's disquisitions upon reasoning encroach so constantly upon that other question of the object-matter, and grounding of science, at the same time that they educe a positive theory on the grounds of our knowledge, and on the method by which we discover them.

But, although Aristotle agreed with Plato in thinking that the essences of things are expressed in the notions, he nevertheless impugned the Platonic theory of ideas, in so far as it taught that this essence is to be found in the general ideas. This

<sup>121</sup> Eth. Nic. vi. 7; and elsewhere.

<sup>122</sup> Anal. Post. ii. 7—10, 14; Met. vi. 1; ix. 10; xi. 7.

controversy is carried on by Aristotle in very different ways. At times, he attacks the manner in which Plato attempts to gain, by means of ideas and of the mathematical notions or numbers, a transition from the becoming, to the eternal verity.<sup>123</sup> In this attack Aristotle confines himself to bringing forward a variety of doubts, which the vagueness of Plato's views, and those of his disciples, on this subject, naturally give rise to, which, although they do not enter deeply into the spirit of the doctrine, are nevertheless well fitted to awaken attention to its weakness. This mode of the controversy does not, however, concern us in the present place, where our first object is that which relates to the notion of essence. In this respect Aristotle objects to the ideal theory, that it posits an essence which has no part in motion and change, for the ideas are said to indicate the eternal alone, and that, consequently, it renders all investigation into nature impossible.<sup>124</sup> This objection was in some measure connected with his conviction, that the ideal theory had its origin in logical as opposed to physical researches. Similarly, Aristotle urged that ethical investigations also are impossible in the ideal theory, since these investigations are not concerned about the good in itself, but the good which is the end and result of human conduct and

<sup>123</sup> See especially Met. i. 6, etc.; xi. 1; xiii. 1, etc.; xiv. 2, etc.

<sup>124</sup> Met. i. 9. οὔτε γὰρ κινήσεως οὔτε μεταβολῆς οὐδεμίας ἔστιν αἰτία ἀνθρώπων. — Ἄλλη γὰρ ἡ περὶ φύσεως σκίψις ἀνύρηται. Ib. vii. 8; xiii. 5; Top. vi. 10; de Gen. et Corr. ii. 9. Here the refutation assumes a somewhat different application relatively to the material: εἰ μὲν γὰρ ἔστιν αἰτία τὰ εἶδη, διὰ τί οὐκ αἰετὶ γεννᾶται συνεχῶς, ἀλλὰ ποτὲ μὲν ποτὲ δ' οὐ, ὁντων δὲ καὶ τῶν εἰδῶν καὶ τῶν μεθεκτικῶν.

actions.<sup>125</sup> From admitting such grounds of science, Aristotle was prevented, by his doctrine that we must rise from the better-known to us, or from that which is more nearly allied to the sensible, to the knowledge of what is better-known in, and by, itself. On this ground he likewise shows, that if the ideas are contained, or ought to be, in us, that they must be moveable or sensible, since there is in the soul a movement and perception of forms.<sup>126</sup> Herein is apparent the endeavour of Aristotle to find such an essence as would facilitate the explanation of experience, and the sensuous phenomenon of becoming, for he regards it as the great defect of the ideal theory that it rends the universal from the material, in order to make it the sole ground of the special.<sup>127</sup> It did not indeed escape Aristotle, that Plato's doctrine does not, altogether, neglect phenomena, but that, on the contrary, it attempts to reconcile sensation with the ideas; but he considered that it accomplishes this not only very vaguely, but even very strangely. Thus he says, that what the Platonists call a participation of objects in the ideas, is mere vague idle talk; <sup>128</sup> and he designates as absurd the position of the ideal theory, that even general notions indicate an essence or entity, since, according to such a

<sup>125</sup> Eth. Nic. i. 4; Eth. Eud. i. 8; Magn. Mor. i. 1.

<sup>126</sup> Top. ii. 7. δοκοῦσι γὰρ αἱ ἰδέαι ἡρεμεῖν καὶ ἀκίνητοι καὶ νοηταὶ εἶναι τοῖς τιθεμένοις ἰδέας εἶναι· ἐν ἡμῖν δὲ οὐσας ἀδύνατον ἀκινήτους εἶναι· κινουμένων γὰρ ἡμῶν ἀναγκαῖον καὶ τὰ ἐν ἡμῖν πάντα συγκινεῖσθαι. δῆλον δ' ὅτι καὶ αἰσθῆται, εἴπερ ἐν ἡμῖν εἰσὶ. διὰ γὰρ τῆς περὶ τὴν ὄψιν αἰσθήσεως τὴν ἐν ἐκάστῳ μορφήν γνωρίζομεν.

<sup>127</sup> Met. i. 8; vii. 13, 16; Phys. ii. 2; Anal. Post. i. 22.

<sup>128</sup> Met. i. 9. τὸ γὰρ μετέχειν οὐθέν ἐστιν. Ib. viii. 6. καὶ τί τὸ μετέχειν ἀποροῦσιν.

view, a single essence might be composed of several different essences; a consequence which would be imperil the legitimacy of the principle of contradiction.<sup>129</sup> At times, indeed, he evidently misinterprets the Platonic doctrine, and is of opinion that Plato considered the ideas to be altogether separate from sensible things,<sup>130</sup> to which he may, perhaps, have been misled by the fact, that Plato does not assign a place to the ideas, but evidently looks upon them as existing wholly without the relations of space.<sup>131</sup> But the principal defect which he imputes to Plato's theory is, that it confounds the grounds of all things, and, by a necessary consequence, teaches, concerning things, doctrines which do not coincide with phenomena. In opposition to this view, Aristotle observes, that it is necessary to assume different grounds of entity, a sensible for the sensible, a perishable for the perishable, and an eternal for what is eternal, and generally to admit for every class of objects a peculiar and corresponding ground.<sup>132</sup> From this confusion of the grounds by Plato, it necessarily resulted that he could not assume any properly

<sup>129</sup> Ib. vii. 14, 16. οὐτ' ἐστὶν οὐσία οὐδεμία ἐξ οὐσίων; ib. viii. 6.

<sup>130</sup> Ib. i. 9. οὐδὲ γὰρ οὐσία ἐκεῖνα τούτων· ἐν τούτοις γὰρ ἂν ἦν· — μὴ ἐνυπάρχοντά γε τοῖς μετέχουσιν. Ib. iii. 2; Anal. Post. i. 11. ἐν παρὰ τὰ πολλά.

<sup>131</sup> Cf. Phys. iii. 4; iv. 2.

<sup>132</sup> De Cælo, iii. 7. συμβαίνει δὲ περὶ τῶν φαινομένων λέγουσι μὴ ὁμολογούμενα λῆγειν τοῖς φαινομένοις. τοῦτου δ' αἴτιον τὸ μὴ καλῶς λαβεῖν τὰς πρώτας ἀρχάς, ἀλλὰ πάντα βούλεσθαι πρὸς τινὰς δόξας ὠρισμένας ἀναγεῖν· δεῖ γὰρ ἴσως τῶν μὲν αἰσθητῶν αἰσθητάς, τῶν δὲ αἰδιῶν αἰδιόους, τῶν δὲ φθαρτῶν φθαρτάς εἶναι τὰς ἀρχάς, ὅλως δὲ ὁμογενεῖς τοῖς ὑποκειμένοις, κ. τ. λ. He is here speaking of the elements. Aristotle thinks that there must be assumed a material ground of a perishable, as well as of an imperishable nature.

supra-sensible ground of things, but believed that, by adding to the sensible ground the words 'in and by itself,' he could elevate it into the supra-sensible.<sup>133</sup> In this respect Aristotle compares the ideal theory to humanizing representations of the deity, for, in the same manner that these form at most but eternal men, the Platonic doctrine makes the sensible species of things conceived as eternal, to be the ground of things.<sup>134</sup> The great absurdity of the doctrine is, that it assimilates in species things, like the perishable and imperishable, which are generically different.<sup>135</sup>

It cannot be denied that, by following out these consequences, Aristotle did not attack Plato in the true spirit of his theory. This spirit Aristotle misunderstood, in consequence of following a very different notion of essence from that which Plato did. While the latter viewed the essence of things in a very general light, and without any proximate determination, as that which exhibits itself in sensible phenomena as the abiding law, which admits of being apprehended in a scientific notion, Aristotle sought to discover some ground which, as absolutely subsisting, should furnish the ground of all things. The principal object of Plato was to dis-

<sup>133</sup> Met. vii. 16. αἴτιον δ' ὅτι οὐκ ἔχουσιν ἀποδοῦναι, τίνες αἱ τοιαῦται ἐσσίαι αἱ ἀφθαρτοὶ παρὰ τὰς καθ' ἑκάστα καὶ αἰσθητάς. ποιοῦσιν οὖν τὰς αὐτάς τῷ εἶδει τοῖς φθαρτοῖς (ταῦτα γὰρ ἴσμεν), αὐτοάνθρωπον καὶ ἀνθρώπου, προστιθέντες τοῖς αἰσθητοῖς τὸ ῥῆμα τὸ αὐτό.

<sup>134</sup> Ib. iii. 2. οὐθενὸς ἤττον ἄτοπον τὸ φάναι μὲν εἶναι τινὰς φυσικὰ παρὰ τὰς ἐν τῷ οὐρανῷ, ταύτας δὲ τὰς αὐτάς φάναι τοῖς αἰσθητοῖς, πλὴν ὅτι τὰ μὲν αἰδία, τὰ δὲ φθαρτά. — παραπλήσιον ποιῶντες τοῖς θεοῖς μὲν εἶναι φάσκουσιν, ἀνθρωποειδεῖς δὲ· οὔτε γὰρ ἐκοῖνοι οὐθὲν ἄλλο ἐποιοῦν ἢ ἀνθρώπους αἰδίου, οὐθ' οὗτοι τὰ εἶδη ἀλλ' ἢ αἰσθητὰ αἰδία.

<sup>135</sup> Ib. x. 10, fin.



cover and to trace the true and the real in all sensible objects, and this he considered to be the essence; Aristotle, on the contrary, sought to explain the origin of sensations by the mutual action and passion of things or their essences. And even if Plato looked upon the true not merely as individual but also as universal, still Aristotle does not deviate from him in this respect; he only objects to Plato's giving to the universal the term essence. Moreover, he took too narrow a view of the ideal theory, when he believed that Plato did not admit ideas of individual objects, as well as of the universal.<sup>136</sup> Here again, he was probably deceived by the language of Plato, who, in truth, does consider every particular idea as a universal, but, at the same time, regards every individual entity as universal or general, since it also comprises under itself a multiplicity of sensuous determinations. That on this point there subsisted nothing more than a verbal misunderstanding between Plato and Aristotle, is clear from the fact, that the latter even looked upon the general, although it may be predicated of many things, as something which, not merely in name but also in being, is one and the same, and as only cognisable by the intellect indeed, but still actually present in the sensible. Aristotle found it necessary to maintain this, because, otherwise, any inference from a universal

<sup>136</sup> Met. vii. 13. δοκεῖ δὲ τὸ καθόλου αἰτιὸν τισιν εἶναι μάλιστα καὶ εἶναι ἀρχὴ τὸ καθόλου. — ἔοικε γὰρ ἀδύνατον οὐσίαν εἶναι ὁτιοῦν τῶν καθόλου λεγομένων. πρώτη μὲν γὰρ οὐσία ἴδιος ἐκάστω, ἢ οὐχ ὑπάρχει ἄλλῃ· τὸ δὲ καθόλου κοινόν· τοῦτο γὰρ λέγεται καθόλου, ὃ πλείοσιν ὑπάρχειν πέφυκε. τίνος οὖν οὐσία τοῦτ' ἔσται; ἢ γὰρ ὑπάντων ἢ οὐθινοῦς. ἀπάντων δ' οὐκ οἶόν τι.

truth would be impossible. He held that science, as Plato had previously shown, is dependent on the universal, only this universal is not something extrinsecal to things.<sup>137</sup> We cannot deny that this account still leaves a difference of view between Aristotle and Plato; which, however, does not consist in this, that while one denied the existence of the general, the other that of the individual, but merely in the different directions they respectively followed in their attempts to explain phenomena. Plato sought to deduce the individual from the universal, but Aristotle, on the contrary, believed that the universal has its grounding in the individual. Logically, the tendency of the latter is mainly expressed in his endeavour to find an ultimate subject of the proposition, an 'hypostasis,' of which all else may be predicated: such are individual objects, for ideas are merely idle words, and the general is not any thing subsisting absolutely in and for itself, but is invariably predicated of something else.<sup>138</sup> We shall presently see that, even in these divergent directions, the two philosophers again meet each other.

According to Aristotle, then, the individual essence alone is the essence properly, i. e. in the

<sup>137</sup> Anal. Post. i. 11. εἶδη μὲν οὖν εἶναι ἢ ἐν τι παρὰ τὰ πολλὰ οὐκ ἀνάγκη, εἰ ἀπόδειξις ἔσται· εἶναι μέντοι ἐν κατὰ πολλῶν ἀληθὲς εἰπεῖν ἀνάγκη. οὐ γὰρ ἔσται τὸ καθόλου, ἂν μὴ τοῦτο ᾗ· ἴαν δὲ τὸ καθόλου μὴ ᾗ, τὸ μέσον οὐκ ἔσται. ὥστ' οὐδὲ ἀπόδειξις. διὲ ἄρα τι ἐν καὶ τὸ αὐτὸ ἐπὶ πλειόνων εἶναι μὴ ὁμῶνυμον. De An. iii. 8. ἔπει δὲ οὐδὲ πρᾶγμα οὐθὲν ἔστι παρὰ τὰ μεγέθη, ὡς δοκεῖ, τὰ αἰσθητὰ κεχωρισμένον, ἐν τοῖς εἶδεσι τοῖς αἰσθητοῖς τὰ νοητὰ ἔστι.

<sup>138</sup> Anal. Post. i. 22. ὅσα ἔτι μὴ οὐσίαν σημαίνει, ἔτι κατὰ τινος ὑποκειμένου κατηγορεῖσθαι καὶ μὴ εἶναι τι λευκόν, ὃ οὐκ ἕτερόν τι ὂν λευκόν ἔστιν. τὰ γὰρ εἶδη χαίρειν· τερετίσματα τε γὰρ ἔστι, κ. τ. λ.

first intention of the word.<sup>139</sup> Genera and species he calls a second essence, the latter more correctly than the former, because they alone show that which the first essences are, but yet are themselves nothing without the individual.<sup>140</sup> The first essence indicate a something self subsisting (*τόδε τι*), which, according to number, is one, but the second essence designates a property, not however abstractedly, but merely so far as it is a property of the first essence.<sup>141</sup> In this we may at once recognise the influence of the Socratic school upon Aristotle; for genera and species are parts of that definition of notions or terms, in which, according to the Socraticists, the essence is expressed. As, however, the difference is a part of this definition, it consequently partakes also in the essence, but it is not a secondary essence; since, as a limitation of the genus, it only indicates the species. He calls it the first property, or the property which is predicated of the essence.<sup>142</sup> But it is also the last difference, as implying all previous differences and genera in such a manner that they need not to be expressed in the definition, for that would be a mere repetition. This last difference, therefore, indicates the essence of the thing.<sup>143</sup> These deter-

<sup>139</sup> Cat. 5. οὐσία δὲ ἔστιν ἡ κυριώτατα καὶ πρῶτως καὶ μάλιστα λεγόμενη, ἢ μήτε καθ' ὑποκειμένου τινὸς λέγεται, μήτε ἐν ὑποκειμένῳ τινὶ ἔστιν· οἷον ὃ τις ἀνθρώπος καὶ ὃ τις ἵππος. Met. v. 8; vii. 1.

<sup>140</sup> Cat. i. 1.

<sup>141</sup> L. 1.

<sup>142</sup> Met. v. 14. τὸ ποῖον λέγεται ἕνα μὲν τρόπον ἢ διαφορὰ τῆς οὐσίας. — ὡς τῆς διαφορᾶς τῆς κατὰ τὴν οὐσίαν ποιότητος οὐσης. — πρώτη μὲν γὰρ ποιότης ἢ τῆς οὐσίας διαφορά. Ib. xi. 12.

<sup>143</sup> Ib. vii. 12. ὁ γὰρ ὁρισμὸς λόγος τίς ἐστιν εἰς καὶ οὐσίως. — οὐθὲν γὰρ ἑτερόν ἐστιν ἐν τῷ ὁρισμῷ πλὴν τὸ τε πρῶτον λεγόμενον γένος καὶ αἱ

minations serve to show, in the clearest manner possible, how great was the endeavour of Aristotle to reduce all to the individual and to the last differences.

As, however, he considered the individual to be the only essence and the ground of phenomena, he was naturally met by the difficulty of explaining how a philosophical knowledge of the grounds of phenomena can be possible, while individuals are infinite in number, and therefore elude knowledge, and while science is only occupied with generals.<sup>144</sup> This difficulty naturally appeared the greater to Aristotle the more he allowed himself to be frightened, by the difficulties presented in the definition of individuals, into assuming that the individual does not admit of being notionally defined, nor generally of being scientifically known, on the ground of its being of a transitory and changeable nature.<sup>145</sup> In fact, we have here a question to which Aristotle is far from giving a satisfactory answer, since he was only too disposed to see in the individual a domain of entity which cannot be fully embraced by science. Still he does not admit that man is absolutely unable to become cognisant of individual substances, and he consequently

διαφοραί. — φανερόν ὅτι ἡ τελευταία διαφορὰ ἡ οὐσία τοῦ πράγματος ἔσται.

<sup>144</sup> Ib. iii. 4. εἴτε γὰρ μὴ ἔστι τι παρὰ τὰ καθέκαστα, τὰ δὲ καθέκαστα ἄπειρα, τῶν δὲ ἀπείρων πῶς ἐνδέχεται λαβεῖν ἐπιστήμην; Ib. c. 6. ταύτας τε οὖν ἀπορίας ἀναγκαῖον ἀπορῆσαι περὶ τῶν ἀρχῶν, καὶ πότερον καθόλου εἰσὶν ἢ ὡς λέγομεν τὰ καθέκαστα. εἰ μὲν γὰρ καθόλου, οὐκ ἔσονται οὐσίαι — εἰ δὲ μὴ καθόλου, ἀλλ' ὡς τὰ καθέκαστα, οὐκ ἔσονται ἐπιστηταί· καθόλου γὰρ αἱ ἐπιστῆμαι πάντων.

<sup>145</sup> Ib. vii. 15. διὰ τοῦτο καὶ τῶν οὐσιῶν τῶν αἰσθητῶν τῶν καθέκαστα οὐθ' ὀρισμὸς οὐτ' ἀπόδειξις ἔστιν, ὅτι ἔχουσιν ὕλην, ἥς ἡ φύσις τοιαύτη ὥστ' ἐνδέχασθαι καὶ εἶναι καὶ μὴ. διὸ φθαρτὰ πάντα τὰ καθέκαστα αὐτῶν.

adopts a middle course, by connecting the existence of individuals with certain general conditions, of which the philosopher may possess a science.<sup>146</sup>

In the individual objects of perception which principally exhibit themselves as substances, two things require to be distinguished—the matter (ὕλη,) and the form (μορφή, εἶδος, λόγος); every individual sensible appears in its totality (σύνολον) as a something consisting of these two, in the same manner as in a *whole* work of art a given material is worked into a given form or shape.<sup>147</sup> Now each of these three equally appears to pretend to be the fundamental essence. For in the first place, the matter may be regarded as that which in itself is *nothing*, neither determinate in magnitude nor aught else that may be predicated of a determinate object. There must, in truth, be something of which all else may be predicated, but which in its own nature is distinct from every species of predicable: if, therefore, this be true of matter, then all else will be predicable of the essence, and this alone of matter, which in that case will be the ground of the essence.<sup>148</sup> On the other hand arises the objection that the essence must pre-eminently be separable and determinate,<sup>149</sup> whereas matter is not

<sup>146</sup> Ib. iv. 2. πανταχοῦ δὲ κυρίως τοῦ πρώτου ἡ ἐπιστήμη, καὶ ἐξ οὗ τὰ ἄλλα ἡρτῆται καὶ δι' ὃ λέγονται. εἰ οὖν τοῦτ' ἐστιν ἡ οὐσία, τῶν οὐσιῶν ἂν δίοι τὰς ἀρχὰς καὶ τὰς αἰτίας ἔχειν τὸν φιλόσοφον.

<sup>147</sup> Ib. vii. 3.

<sup>148</sup> L. 1. λέγω δ' ὕλην, ἣ καθ' αὐτὴν μήτε τί, μήτε ποσόν, μήτε ἄλλο μηθὲν λέγεται, οἷς ὥρισται τὸ ὄν. (cf. ib. viii. 1.) ἔστι γάρ τι, καθ' οὗ κατηγορεῖται τούτων ἕκαστον, ὃ τὸ εἶναι ἕτερον καὶ τῶν κατηγοριῶν ἐκάστω· τὰ μὲν γὰρ ἄλλα τῆς οὐσίας κατηγορεῖται, αὕτη δὲ τῆς ὕλης.

<sup>149</sup> L. 1. ἐκ μὲν οὖν τούτων θεωροῦσι συμβαίνειν οὐσίαν εἶναι τὴν ὕλην.



such a separable, and can only be conceived of as that which at different times is found in the most opposite forms, and which therefore indicates nothing of a determinate nature.<sup>150</sup> These determinations, which Aristotle gives of the idea of matter, will become clear and obvious when we shall have examined the views and ideas out of which this notion arose upon his mind. In the mind of Aristotle the notion of matter is invariably combined with that of *becoming*. Now out of nothing comes nothing. There must, therefore, antecedently be something out of which that which becomes, may become. But now every becoming is a passage from opposite into opposite, as Plato had already shown : as then an opposite cannot become its opposite, therefore the substratum of all becoming must be a something which passes from opposite to opposite, and in this passage remains itself. This permanent substratum is what Aristotle calls matter.<sup>151</sup> It is without any determinate quality, because essences even arise and pass away, and therefore imply the existence of some substratum or basis which is without essence. If a casket be

ἀδύνατον δι'· καὶ γὰρ τὸ χωριστὸν καὶ τόδε τι ὑπάρχειν δοκεῖ μάλιστα τῇ οὐσίᾳ.

<sup>150</sup> 1b. c. 11. ἀόριστον γάρ. Phys. iv. 9. ἡμεῖς δὲ λέγομεν ἐκ τῶν ὑποκειμένων ὅτι ἔστιν ὕλη μία τῶν ἐναντίων. — καὶ ἐκ δυνάμει ὄντος ἐνεργείᾳ ὃν γίνεται· καὶ οὐ χωριστὴ μὲν ἡ ὕλη, τῇ δ' εἶναι ἕτερον καὶ μία τῇ ἀριθμῷ. De Gen. et Corr. ii. 1, 5.

<sup>151</sup> Met. xii. 2. ἡ δ' αἰσθητὴ οὐσία μεταβλητὴ· εἰ δὲ ἡ μεταβολὴ ἐκ τῶν ἀντικειμένων ἢ τῶν μεταξὺ, ἀντικειμένων δὲ μὴ πάντων (οὐ λευκὸν γὰρ ἡ φωνή), ἀλλ' ἐκ τοῦ ἐναντίου, ἀνάγκη ὑπεῖναι τι τὸ μεταβάλλον εἰς τὴν ἐναντίωσιν. οὐ γὰρ τὰ ἐναντία μεταβάλλει. ἔτι τὸ μὲν ὑπομένει, τὸ δ' ἐναντίον οὐχ ὑπομένει· ἔστιν ἄρα τι τρίτον παρὰ τὰ ἐναντία, ἡ ὕλη.

made of wood, it is called wooden, and if the earth be a formation from the air, it would be aerial, and if the air were a state of fire, it would be fiery, and fire would be the prime matter; and as all is composed of the prime matter, the prime matter cannot be called by any of its special modifications (*ἐκείνινον*), but on the contrary all is called material from it.<sup>152</sup> It is neither a body nor perceptible, for we cannot conceive a perceptible body devoid of those *contraries* which are involved in all perception.<sup>153</sup> The one indistinguishable matter is opposed to no single thing, on the contrary it is capable of becoming successively every one of all contraries.<sup>154</sup> It is merely that which is able to be, and not to be aught, and on this account it is defined to be that which actually is neither this nor that, but only potentially; <sup>155</sup> or rather it is the first ground of all things, out of which, as not accidentally contained in itself, everything is produced, and into which, when dissolved, all ultimately passes.<sup>156</sup> By this explanation of matter Aristotle prides himself upon having conquered the difficulty so frequently insisted upon of explaining the possibility of aught coming into being without supposing that it is pro-

<sup>152</sup> Phys. i. 6, 7; de Gen. et Corr. ii. 5; Met. ix. 7. *εἰ δὲ τί ἴσται πρῶτον, ὃ μηκέτι κατ' ἄλλου λέγεται ἐκείνινον, τοῦτο πρώτη ὕλη.*

<sup>153</sup> De Gen. et Corr. i. 5; ii. 1.

<sup>154</sup> Met. xii. 10. *ἡ γὰρ ὕλη ἡ μία οὐθενὶ ἐναντίον.* Ib. x. 10; de Gen. et Corr. i. 1.

<sup>155</sup> Met. vii. 7. *δυνατὸν γὰρ εἶναι καὶ μὴ εἶναι ἕκαστον αὐτῶν τοῦτο δ' ἐστὶν ἐν ἐκάστω ὕλη.* Ib. viii. 1. *ὕλην δὲ λέγω, ἥ μὴ τόδε τι οὐσα ἐνεργείᾳ, δυνάμει ἴσται τόδε τι.*

<sup>156</sup> Phys. i. 9. *λέγω γὰρ ὕλην τὸ πρῶτον ὑποκείμενον ἐκάστω, ἐξ οὗ γίνεταί τι ἐνυπάρχοντος μὴ κατὰ συμβεβηκός· εἰ τε φθείρεται τι, εἰς τοῦτο ἀφίξεταί ἰσχατον.*

duced out of non-being. For it is not out of the non-being absolutely, but merely out of that which as to actuality is non-being, but which potentially is, that aught is produced.<sup>157</sup> This will serve to explain how it was that Aristotle was able to call matter a relatively non-being,<sup>158</sup> and at the same time will render it obvious that we are here touching upon one of the most important distinctions in his theory, since the relation between the notion of matter and the contrariety of potential (*δύναμις*) and actual (*ἐνέργεια*) is here employed in the solution of one of the most difficult problems in philosophy.<sup>159</sup> Matter is not the potential, for this in its nature is an opposite, but it is that which lies at the ground of all things, which comprises in itself a potentiality to undergo the most opposite determinations.<sup>160</sup> This notion of matter Aristotle formed solely in conformity to the general laws of the understanding, by which phenomena are considered; on this ground he declares it to be imperceptible, nay more, in itself absolutely unknowable;<sup>161</sup> it is only by analogy that any idea of it

<sup>157</sup> Ib. i. 8; Met. xii. 2. ἐπεὶ δὲ διττὸν τὸ ὄν, μεταβάλλειν πᾶν ἐκ τοῦ δυνάμει ὄντος εἰς τὸ ἐνέργειᾳ ὄν, ὅλον ἐκ λευκοῦ δυνάμει εἰς τὸ ἐνέργειᾳ λευκόν. ὁμοίως δὲ καὶ ἐκ' αὐξήσεως καὶ φθίσεως. ὥστε οὐ μόνον κατὰ συμβεβηκὸς ἐνδέχεται γίνεσθαι ἐκ μὴ ὄντος, ἀλλὰ καὶ ἐξ ὄντος γίγνεται πάντα, δυνάμει μέντοι ὄντος, ἐκ μὴ ὄντος δὲ ἐνέργειᾳ. Ib. iv. 5; vii. 7.

<sup>158</sup> Phys. i. 8, 9. καὶ τούτων τὸ μὲν οὐκ ὄν εἶναι κατὰ συμβεβηκὸς τῇ ὄλῃ.

<sup>159</sup> I here render *ἐνέργεια* by 'actuality,' not as completely equivalent to the idea which, with Aristotle, assumes a still more precise signification, which, however, it is impossible to explain in the present place.

<sup>160</sup> Met. xi. 9. τὸ μὲν γὰρ δύνασθαι ὑγιαίνειν καὶ δύνασθαι κάμνειν οὐ ταῦτόν· καὶ γὰρ ἂν τὸ ὑγιαίνειν καὶ τὸ κάμνειν ταῦτόν ᾗν· τὸ δ' ὑποκείμενον καὶ ὑγιαῖνον καὶ νοσοῦν — ταῦτό καὶ ἔν. The same is asserted in nearly the same words in Phys. iii. 1.

<sup>161</sup> Met. vii. 10. ἡ δ' ὅλη ἀγνωστος καθ' αὐτήν.



can be formed; it being argued, that the same relation must subsist between the brass and the statue, and between the wood and the bench, as between the prime matter and the essence,—the determinate thing and the all that is.<sup>162</sup> When, therefore, Aristotle speaks of a sensible matter, and of one to be conceived only by the understanding,<sup>163</sup> we must understand by the former, matter fashioned into a determinate existence, and by the latter, the same matter merely so far as it is only conceivable under some abstract, or perhaps mathematical notion. We must not omit to mention, that he found it necessary to assume such an indeterminate nature as that of matter, principally on this account, that he might be able satisfactorily to account for those phenomena which occasionally fall without the necessary and common course of things. For all other causes work necessarily, and by law; but this indeterminate matter forms no fixed ground of events, and can therefore work without law or order.<sup>164</sup> Here, again, we arrive at a point where Aristotle sets a limit to scientific knowledge,<sup>165</sup> merely because he

<sup>162</sup> Phys. i. 7. ἡ δ' ὑποκειμένη φύσις ἐπιστητὴ κατὰ ἀναλογίαν ὥς γὰρ πρὸς ἀνδριάντα χαλκὸς ἢ πρὸς κλίνην ξύλον ἢ πρὸς τῶν ἄλλων τι τῶν ἰχόντων μορφήν, ἡ ὕλη καὶ τὸ ἄμορφον ἔχει πρὶν λαβεῖν τὴν μορφήν, οὕτως αὕτη πρὸς οὐσίαν ἔχει καὶ τὸ τόδε τι καὶ τὸ ὄν.

<sup>163</sup> Met. vii. 10; viii. 6.

<sup>164</sup> Met. vi. 2. ὥστε ἔσται ἡ ὕλη αἰτία ἡ ἰνδεχομένη παρὰ τὸ ὥς ἐπιτοπολὸν τοῦ συμβεβηκότος.

<sup>165</sup> L. I. περὶ τοῦ κατὰ συμβεβηκὸς λεκτίον, ὅτι οὐδεμία ἐστὶ περὶ αὐτοῦ θεωρία. Aristotle distinguishes two species of the συμβεβηκός: one indicates that which pertains to an object only accidentally, and is not comprehended in the notion of it; the other is relative to becoming, which does not observe any fixed law. The former exists only in name, and is near akin to non-being; the latter, on the other hand, is real and true. Met. v. 30. συμβεβηκὸς λέγεται, ὃ ὑπάρχει μὲν τινι καὶ ἀληθὲς εἰπεῖν, οὐ μὲντοι ἐξ ἀνάγκης οὐτ' ἐπὶ

himself is unable to render intelligible, by any general law of science, the accidental and the contingent, whose occurrence is wholly without order or restraint.

Adhering, then, to this notion of matter, in the sense in which it was understood by Aristotle, we see at once that, in his mind, it could not possibly indicate an essence; for matter is without actuality. Nevertheless, with Aristotle the term matter is in certain respects equivalent with the notion of essence. He says, matter is, in a certain degree, essence,<sup>166</sup> or it is an essence in so far as it is the basis of opposite transformations.<sup>167</sup> This point, however, will best be understood in detail, when we shall have learned to understand another aspect of the Aristotelian doctrine of individual essence: in the present place, it will suffice to observe that he invariably refers the individual essence to the universal, by considering matter as its ground.

If, then, the view that matter, simply, is the essence of all sensible things, is untenable, we must proceed to consider the question, whether the form is the essence. Now the notion of form, like that of matter, is educed by Aristotle from analogy. He asserts that this notion cannot be gotten directly, but that the relation of form to matter resembles that of the workman to his material, of the waker to the sleeper, of the man with open eyes to him whose eyes are closed; lastly, of that which is

τὸ πολὺ. That there must be such accidents, results from the existence of what takes place by rule, for this implies the irregular. Met. vi. 2.

<sup>166</sup> Phys. i. 9. καὶ τὴν μὲν ἐγγὺς καὶ οὐσίαν πως, τὴν ἕλην.

<sup>167</sup> Met. viii. 1. ὅτι δ' ἐστὶν οὐσία καὶ ἡ ἕλη, δῆλον. ἐν πάσαις γὰρ ταῖς ἀντικειμέναις μεταβολαῖς ἐστὶ τι τὸ ὑποκείμενον ταῖς μεταβολαῖς.

wrought to what is unwrought.<sup>168</sup> From these analogies it is clear that with Aristotle the form indicates whatever a thing is actually, whereas matter is the universal potentiality of becoming all things.<sup>169</sup> Accordingly, he necessarily held the form to be in the closest connection with the essence, even in a connection closer than matter: for of everything it may be more properly said that it is, when it is actually, than when it is merely potentially; <sup>170</sup> and on this account, the form, as compared with matter, appears the better and the more perfect of the two.<sup>171</sup> Those who are well acquainted with Aristotle's mode of expressing himself, and know that he oftentimes says more than he means, will not wonder if they find him proceeding further in this direction, and expressly naming the form, the essence,<sup>172</sup> or that which a thing is, and the notion of the thing, because the essence is expressed in the notion.<sup>173</sup>

<sup>168</sup> Met. ix. 6. *δῆλον δ' ἐπὶ τῶν καθ' ἕκαστα τῇ ἐπαγωγῇ, ὃ βουλόμεθα λέγειν, καὶ οὐ δεῖ παντὸς ὅρον ζητεῖν, ἀλλὰ καὶ τὸ ἀνάλογον συνορᾶν ὅτι ὡς τὸ οἰκοδομοῦν πρὸς τὸ οἰκοδομικόν, καὶ τὸ ἐργηγορὸς πρὸς τὸ καθεῦδον, καὶ τὸ ὀρῶν πρὸς τὸ μῦον μὲν, ὅψιν δὲ ἔχον, καὶ ἀποκεκριμένον ἐκ τῆς ὕλης πρὸς τὴν ὕλην, καὶ ἀπειργασμένον πρὸς τὸ ἀνέργαστον, ταύτης δὲ τῆς διαφορᾶς θάτερον μόνιον ἔστω ἡ ἐνέργεια ἀφωρισμένη, θατέρῳ δὲ τὸ δυνατόν.*

<sup>169</sup> De An. ii. 1. *λέγομεν δὴ γένος ἓν τι τῶν ὄντων τὴν οὐσίαν, ταύτης δὲ τὸ μὲν ὡς ὕλην, ὃ καθ' αὐτὸ μὲν οὐκ ἔστι τόδε τι, ἕτερον δὲ μορφήν καὶ εἶδος, καθ' ἣν ἡδὴ λέγεται τόδε τι.* Ib. viii. 2. *τοῦ εἶδους καὶ τῆς ἐνεργείας. — ἡ ἐνέργεια καὶ ἡ μορφή.* Such is the constant expression of Aristotle.

<sup>170</sup> Phys. ii. 1. *καὶ μᾶλλον φύσις αὕτη (sc. ἡ μορφή) τῆς ὕλης ἕκαστον γὰρ τότε λέγεται, ὅταν ἐντελεχία ᾖ, μᾶλλον ἢ ὅταν δυνάμει.*

<sup>171</sup> E. g. de Caelo, iv. 3, 4; de Part. An. i. 1. *ἡ γὰρ κατὰ τὴν μορφήν φύσις κυριωτέρα τῆς ὕλης φύσεως.*

<sup>172</sup> Met. vii. 7. *εἶδος δὲ λέγω τὸ τί ἦν εἶναι ἐκάστου καὶ τὴν πρώτην οὐσίαν.* Ib. 11. *ἡ οὐσία γὰρ ἔστι τὸ εἶδος τὸ ἐνόν.* De Part. An. i. 1. *τῆς φύσεως διχῶς λεγομένης καὶ οὐσης, τῆς μὲν ὡς ὕλης, τῆς δ' ὡς οὐσίας.*

<sup>173</sup> Phys. i. 7. *τὸ γὰρ εἶδει λέγω καὶ λόγῳ ταυτόν.* Ib. ii. 1. *ἡ μορφή καὶ τὸ εἶδος τὸ κατὰ τὸν λόγον.* Ib. 9; de Gen. et Corr. i. 2; de An. i. 1; de

We here find Aristotle pursuing the same direction as that which led Plato to his ideal theory. For form, which is here opposed to matter, is evidently regarded by him as opposed to the corporeal and sensible; and when he explains it to be the first essence, or to be the essence and nature, in a higher degree than matter, he evidently betrays a disposition to make the rational idea the ground of phenomena; or, at least, if the claims of matter to be regarded as a ground, cannot be entirely rejected, to assign, in his exposition of phenomena, a higher place to the intellectual than to the material principle. But although the master and the disciple agree on this head, the widely diverging peculiarities of their systems become, even at this point, distinctly noticeable. For while Plato boldly takes his flight into the world of ideas, Aristotle deems it more prudent to detain us in the sensible world, and to adhere to that which manifests itself to us as an essence, and announces itself as such to the senses. Accordingly, he deems it necessary to remark, that in all things which come into being, the form or reality of existence, or the idea, has a sensuous condition, and is not separable from matter, or the potentiality to be or not to be, unless notionally, i. e. in the conception. To maintain this he felt to be necessary, inasmuch as in every definition which in truth expresses the essence, not

Part. An. i. 1.; Top. vii. 3. ὅρος λόγος ὁ τὸ τί ἦν εἶναι τῷ πράγματι δηλῶν. Met. v. 8; vii. 4, 5. μόνον τῆς οὐσίας ἐστὶν ὁ ὁρισμός. — ὅτι μὲν οὖν ἐστὶν ὁ ὁρισμός ὁ τοῦ τί ἦν εἶναι λόγος καὶ τὸ τί ἦν εἶναι ἢ μόνον τῶν ὁσίων ἢ μάλιστα καὶ πρώτως καὶ ἀπλῶς, δῆλον.

<sup>174</sup> Met. viii. 1. ὁ λόγος καὶ ἡ μορφή, ὃ τόδε τι ἐν τῇ λέγει χωριστὸν ἐστὶ. Phys. ii. 1. ἡ μορφή καὶ τὸ εἶδος οὐ χωριστὸν ὅν ἀλλ' ἢ κατὰ τὸν λόγον.

the form alone is given, but a certain portion of the material is invariably combined with it.<sup>175</sup> Aristotle here touches upon a difficulty which had previously been often mooted, which, however, had not, to his mind, been hitherto satisfactorily removed. For instance, since the definition consists of the genus and the difference, the question arises, how of these two such a unity results as may express the oneness of the essence, and whether the essence itself is not rather a duality—the genus and the difference—since both are comprised in the notion. This difficulty, we are told by Aristotle, can only be solved by the difference between matter and form of the essence. Genus and difference<sup>176</sup> are connected together in the same way as matter and form, and constitute a unity of thought, just as matter and form constitute a oneness of being. The latter cannot be separated in sensible objects, because both indicate the same; the one,

<sup>175</sup> Phys. ii. 9. ἔστι γὰρ καὶ ἐν τῷ λόγῳ ἓνια μόρια ὡς ὕλη τοῦ λόγου. Met. viii. 6. καὶ αἰεὶ τοῦ λόγου τὸ μὲν ὕλη, τὸ δ' ἐνέργειά ἐστιν, οἷον δὲ κύκλος σχῆμα ἐπίπεδον.

<sup>176</sup> Met. vii. 12. λέγω δὲ ταύτην τὴν ἀπορίαν, διὰ τί ποτε ἔν ἐστιν οὗ τὸν λόγον ὁρισμὸν εἶναι φαινομένον· οἷον τοῦ ἀνθρώπου τὸ ζῶον δῖπουν (ἔστω γὰρ οὗτος αὐτοῦ λόγος)· διὰ τί δὲ τοῦτο ἔν ἐστιν, ἀλλ' οὐ πολλά, ζῶον καὶ δῖπουν; — δεῖ δὲ γε ἔν εἶναι ὅσα τῷ ὁρισμῷ· ὁ γὰρ ὁρισμὸς λόγος τίς ἐστιν εἰς καὶ οὐσίας. — τοῖν δυοῖν δὲ τὸ μὲν διαφορά, τὸ δὲ γένος. — εἰ οὖν τὸ γένος ἀπλῶς μὴ ἐστὶ παρὰ τὰ ὡς γένους εἶδη, ἢ εἰ ἔστι μὲν, ὡς ὕλη δ' ἔστιν (ἢ μὲν γὰρ φωνὴ γένος καὶ ὕλη, αἱ δὲ διαφοραὶ τὰ εἶδη καὶ τὰ στοιχεῖα ἐκ ταύτης ποιούσιν)· φανερόν ὅτι ὁ ὁρισμὸς ἐστὶν ὁ ἐκ τῶν διαφορῶν λόγος. Ib. viii. 6. εἰ δ' ἐστὶν, ὥσπερ λέγομεν, τὸ μὲν ὕλη, τὸ δὲ μορφή, καὶ τὸ μὲν δυνάμει, τὸ δ' ἐνέργειᾳ, οὐκέτι ἀπορία δόξειεν ἂν εἶναι τὸ ζητούμενον. — οὐκέτι δ' ἡ ἀπορία φαίνεται, ὅτι τὸ μὲν ὕλη, τὸ δὲ μορφή. τί οὖν τούτου αἴτιον, τοῦ τὸ δυνάμει ἐν ἐνέργειᾳ εἶναι, παρὰ τὸ ποιῆσαν ἐν ὅσοις ἐστὶ γίνεσις; οὐθὲν γὰρ ἐστὶν αἴτιον ἕτερον τοῦ τὴν δυνάμει σφαῖραν ἐνέργειᾳ εἶναι σφαῖραν, ἀλλὰ τοῦτ' ἦν τὸ τί ἦν εἶναι ἐκατέρῃ. — καὶ τὸ δυνάμει καὶ τὸ ἐνέργειᾳ ἔν πῶς ἐστιν.

however, potentially, but the other actually, for in sensible objects actuality and potentiality are invariably combined, and in a certain respect are one. This solution, however, leads at once to the question, What, then, in a definition, is indicative of matter, and what of form? On this point, Aristotle decides that the genus, in so far as it expresses that which lies at the ground, that which in itself is indeterminate, stands for matter; and that, on the other hand, the difference which constitutes the definite and individual essence, represents the form.<sup>177</sup> Here, again, we meet with Aristotle's tendency to the knowledge of the individual, and to the explanation of phenomena thereby. On this account, also, he hesitates to admit that matter is the ground of multiplicity; but prefers to make matter to be a single essence, and teaches that a multiplicity of essences first arises out of that which produces the form,<sup>178</sup> and that the actuality of form separates one from another.<sup>179</sup> In connection herewith is Aristotle's disposition to carry back the definition to the last difference, so that he makes the essence, so far as it has its ground principally in

<sup>177</sup> Met. vii. 12; viii. 2. *ἔοικε γὰρ ὁ μὲν διὰ τῶν διαφορῶν λόγος τοῦ εἶδους καὶ τῆς ἰνεργείας εἶναι, ἡ δ' ἐκ τῶν ἐνυπαρχόντων τῆς ὕλης μᾶλλον.* Ib. x. 8. *τὸ δὲ γένος ὕλη, οὗ λέγεται γένος.* De Part. An. i. 3. *ἔστι δ' ἡ διαφορά τὸ εἶδος ἐν τῇ ὕλῃ.* Cf. Met. iii. 3; v. 28; de Gen. et Corr. i. 7.

<sup>178</sup> Met. i. 6. *φαίνεται δ' ἐκ μιᾶς ὕλης μία τράπεζα, ὁ δὲ τὸ εἶδος ἐπιφέρων εἰς ὧν πολλὰς ποιεῖ. ὁμοίως δ' ἔχει καὶ τὸ ἄρρεν πρὸς τὸ θῆλυ· τὸ μὲν γὰρ θῆλυ ὑπὸ μιᾶς πληροῦται ὀχείας, τὸ δ' ἄρρεν πολλὰ πληροῖ· καίτοι ταῦτα μῆμματα τῶν ἀρχῶν ἐκείνων ἐστί.*

<sup>179</sup> Ib. vii. 13. *ἡ γὰρ ἐντελέχεια χωρίζει.* Cf. ib. ix. 9. *εὐρίσκεται δὲ καὶ τὰ διαγράμματα ἰνεργείᾳ. ἑταιροῦντες γὰρ εὐρίσκουσιν.* The Energy stands in the same relation to the *δυνατόν* as the *τὸ ἀποκεκριμένον* ἐκ τῆς ὕλης πρὸς τὴν ὕλην. See Trendelenb. in Arist. de An. p. 302.

the form, to be grounded in the last difference alone.<sup>180</sup> In this, however, we have again nothing more than a partial expression of Aristotle's view ; for when he reviews the whole subject, he does not make the definition to consist in the difference solely, but merely chiefly, and insists that to the difference there must be added the genus, and consequently the essence is grounded not in the form alone, but in matter also ; or, in other words, the essence is compounded both of form and matter.<sup>181</sup>

Before we dismiss the notions of form and matter, it is necessary to notice a few points which will serve to elucidate Aristotle's use of them. It is obvious that in the application of these notions to the objects of knowledge which fall within the sphere of sense, they possess nothing more than a relative signification, since every sensible, as comprising within itself both form and matter, may, in reference to one, be designated form, and matter in reference to the other. Thus brass is, in reference to the statue which is formed out of it, matter, but, contrariwise, form, relatively to its component elements. The two, therefore, pass easily into each other, and indicate the same object, merely under two different aspects. This Aristotle indicates by the assumption of two kinds of matter, or potentiality, and two of form, or actuality. This difference he elucidates, after his usual custom, by

<sup>180</sup> Ib. vii. 12. *ἡ τελευταία διαφορὰ ἡ οὐσία τοῦ πράγματος ἔσται καὶ ὁ ὁρισμός.* — *ἰὰν μὲν δὴ διαφορᾶς διαφορὰ γίγνηται, μία ἔσται ἡ τελευταία τὸ εἶδος καὶ ἡ οὐσία.* Cf. de Gen. An. ii. 3. *τὸ δ' ἰδίον ἐστὶ τὸ ἐκάστου τῆς γενέσεως τέλος.*

<sup>181</sup> Met. viii. 3 ; Phys. i. 7. Aristotle admits of three definitions, of which, however, two are imperfect, and give either the form alone, or the matter alone ; the third, only, is perfect, and gives both elements. Met. viii. 2 ; cf. Anal. Post. ii. 10.

certain obvious instances. He observes, that we should say in one sense, of a boy, in another, of a grown man, that he has the potentiality of leading an army; as also that we should say, in one sense, of the student, that potentially he knows, and, in another, of the scholar, who, however, does not as yet think scientifically. To these two kinds of matter two kinds of form correspond, of which one, indeed, expresses an actuality, which, however, is not as yet in activity, while the other, besides the actuality, possesses the befitting activity. Thus one possesses science, without, however, being scientific, while another possesses and also employs it.<sup>182</sup> Here matter and form become coincident, and the same thing is, in the second signification, matter, and form in the first. Accordingly, Aristotle frequently pursues through several steps, this transition of one notion into another, and occasionally speaks of one matter being nearer than another to form. It is obvious that it is consistent with this habit of thought, to seek for some ultimate form which absolutely is not matter, but form, simply, in the same manner as a first matter was assumed, which absolutely is not form; but that whatever is intermediate between these two extremes, must in one respect be regarded as matter, and in another as form.

One who, like Aristotle, usually makes his know-

<sup>182</sup> Phys. viii. 4. ἔστι δὲ δυνάμει ἄλλως ὁ μανθάνων ἐπιστήμων καὶ ὁ ἔχων ἤδη καὶ μὴ θεωρῶν, κ. τ. λ. De An. ii. 5. οὐχ ἀπλοῦ ὄντος τοῦ δυνάμει λεγομένου, ἀλλὰ τοῦ μὲν ὥσπερ ἂν εἴποιμεν τὸν παῖδα δύνασθαι στρατηγεῖν, τοῦ δὲ ὡς τὸν ἐν ἡλικίᾳ ὄντα. Ib. c. 1. τὸ δ' εἶδος ἐντελέχεια καὶ τοῦτο διχῶς, τὸ μὲν ὡς ἐπιστήμη, τὸ δ' ὡς τὸ θεωρεῖν. Several more gradations in this relation are given in, de Gen. An. ii. 1. ἐγγυτέρω δὲ καὶ πορρώτέρω αὐτὸ αὐτοῦ ἐνδέχεται εἶναι δυνάμει, ὥσπερ ὁ καθεὺδων γεωμέτρης τοῦ ἐγρηγορότος πορρώτέρω καὶ οὗτος τοῦ θεωροῦντος.



ledge of the earlier philosophy the starting-point of his own disquisitions, must naturally have multifariously mixed up the most important notions of his own system with the questions which occupied the minds of anterior philosophers. This was the case especially with the notion of matter. It is easy to perceive how greatly his researches on this subject have been enriched, in many respects, by being brought into connection with certain favourite disquisitions of the Greeks. Originally, Aristotle's notion of matter was intended to indicate the indeterminate ground of all sensible becoming; the idea of such a ground was gradually raised to a more extensive generality, by being carried back to the notion of a general potentiality of being. Never before had this idea been presented with such distinctness, and so abstracted from all form, although indeed, as we previously saw, the Pythagoreans, and still more Plato, had advanced far on the road to such a result. Aristotle differs from Plato principally in this, that he does not, with his master, seek for any ground of matter itself. But, on the other hand, in the same way that Plato considered the existence of matter merely in its relation to the ideas, so, too, with Aristotle, matter is merely relative. In and by itself, matter is nothing;<sup>183</sup> and can only be thought of in relation to form, for there is a different matter for every form.<sup>184</sup> This is, so far, in accordance with Aristotle's view, as in the general potentiality there is always understood a something which is potential to some actuality;

<sup>183</sup> Met. vii. 10. τὸ δ' ὕλικόν οὐδέποτε καθ' αὐτὸ λεκτικόν.

<sup>184</sup> Phys. ii. 2. ἔτι δὲ τῶν πρὸς τι ἢ ὕλη· ἄλλω γὰρ εἶδει ἄλλη ὕλη.

and at the same time it is connected with the other view already noticed, that even the contingent has its last ground in the material, because the contingent consists in some relation or condition.<sup>185</sup> By this, the idea of matter has evidently acquired a large accession to its original determination, for the potential, however indeterminate, cannot in any wise withdraw itself from the determinations of ordering law. Thus, we have this notion tacitly attaching to itself the conception of an opposition which is offered by matter to form, and consequently of something which the intellect cannot apprehend.

Thus, then, in matter, which enters into all things, Aristotle finds the limits of science from which it is unable to free itself. Individual essences are incomprehensible according to the degree of matter which they contain; they are not knowable as to their differences, because they are only different from each other in body and matter.<sup>186</sup> With the Pythagoreans and Plato, the notion of the sensible and the material was connected with that of the infinite, and this view is adopted by Aristotle also, with whom the infinite is identical with the unintelligible. The necessity of admitting an infinity, resulted clearly to his mind from the doctrines of the earlier philosophers, who had deduced

<sup>185</sup> Met. v. 15.

<sup>186</sup> Met. vii. 11. ταύτης (sc. τῆς οὐσίας τῆς συνόλης) δὲ γ' ἔστι πως λόγος καὶ οὐκ ἔστι. μετὰ μὲν γὰρ τῆς ὕλης οὐκ ἔστιν (ἀόριστον γάρ)· κατὰ τὴν πρώτην δ' οὐσίαν ἔστιν, ὅλον ἀνθρώπου ὁ τῆς ψυχῆς λόγος. Ib. x. 9. σὺ ποιῇ δὲ διαφορὰν ἡ ὕλη. οὐκ ἀνθρώπου γὰρ εἶδη εἰσιν οἱ ἄνθρωποι. διὰ τοῦτο καίτοι ἕτεραι αἱ σάρκες καὶ τὰ ὀστέα, ἐξ ὧν ὅδε καὶ ὅδε, ἀλλὰ τὸ σύνολον ἕτερον μὲν, εἶδει δ' οὐχ ἕτερον. This, then, limits the position that the difference and the peculiar lies in the form.

it partly from the infinite procession of time, partly from the infinite divisibility of space, and partly from the infinite production of things, as well as from the necessity of whatever is limited being limited by something, and principally from the consideration that any magnitude soever being given, a greater is always conceivable.<sup>187</sup> But the investigation of this subject belongs principally to physics. In a general point of view, however, in which alone we have here to do with it, it is clear that an infinity must be admitted, and that, too, as a ground of things; for it cannot itself be grounded in aught else, for otherwise it would have in it its limits and bounds.<sup>188</sup> In and by itself, however, it is inconceivable; for it is merely a property of extended magnitude, so much so that it might perhaps be regarded as nothing more than as a determination of some other entity. But, again, it is inconceivable as a mere determination of any other essence, for in that case it could not be a ground or principle, but that of which it is a mere determination, must be regarded as its ground.<sup>189</sup> As, then, the infinite is not conceivable, either as an essence, or as a determination of any other essence, it necessarily follows that it must be merely in potentiality; and it consists merely in this, that it is always possible to take more and more, either in addition or subtraction, and so on for ever. Whatever is taken ac-

<sup>187</sup> Phys. iii. 4.

<sup>188</sup> L. I. εὐλόγως δὲ καὶ ἀρχὴν αὐτὸ τίθασι πάντες· οὔτε γὰρ μάτην αὐτὸ οἶον τε εἶναι, οὔτε ἄλλην αὐτῷ ὑπάρχειν δύναμιν πλὴν ὡς ἀρχήν· ἅπαντα γὰρ ἢ ἀρχὴ ἢ ἐξ ἀρχῆς· τοῦ δὲ ἀπείρου οὐκ ἔστιν ἀρχή· εἴη γὰρ ἀν' αὐτοῦ πέρας.

<sup>189</sup> Ib. c. 5.

tually, is always finite, but not always the same finite; and this process of augmentation or diminution can proceed for ever; since, otherwise, there would be both a beginning and an end of time, neither could extended magnitude be infinitely divided, nor numbers proceed to infinity. Consequently, the infinite does exist in a certain sense, though only potentially, and without ever attaining to actuality; it is also, as the indeterminate cause, i. e. as matter, a principle and ground.<sup>190</sup> It is on this account that Aristotle calls the infinite, as well as matter, ingenerate and imperishable.<sup>191</sup>

In this doctrine, for the first time, the limits of science are presented in any but a very brilliant light. For in all that preceded, even though matter, so far as it had not yet attained to form, appeared to be beyond cognition, we might still console ourselves with the hope that it would at some time attain to form and actuality; here, however, this hope forsakes us entirely, for we are told that matter can never attain to actuality, and consequently can never become an object of knowledge. This admission of an infinite stands prominently

<sup>190</sup> L. I. ἀλλ' ἀδύνατον τὸ ἐντελεχέειν ὃν ἄπειρον· ποσὸν γάρ τι εἶναι ἀναγκαῖον. Ib. c. 6. ὅτι δ', εἰ μὴ ἔστιν ἄπειρον ἀπλῶς, πολλὰ ἀδύνατα συμβαίνει δῆλον. τοῦ τε γὰρ χρόνου ἔσται τις ἀρχὴ καὶ τελευτὴ, καὶ τὰ μεγέθη οὐ διαιρετὰ εἰς μέγεθος, καὶ ἀριθμὸς οὐκ ἔσται ἄπειρος. — λείπεται οὖν δυνάμει εἶναι τὸ ἄπειρον. οὐ δεῖ δὲ τὸ δυνάμει ὃν λαμβάνειν, ὥσπερ εἰ δυνατὸν τοῦτ' ἀνδριάντα εἶναι, ὡς καὶ ἔσται τοῦτ' ἀνδριάς, οὔτω καὶ ἄπειρόν τι, ὃ ἔσται ἐνεργείᾳ· ἀλλ' ἐπεὶ πολλαχῶς τὸ εἶναι, ὥσπερ ἡ ἡμέρα ἔστι καὶ ὁ ἀγὼν τῷ αἰεὶ ἄλλο καὶ ἄλλο γίγνεσθαι, οὔτω καὶ τὸ ἄπειρον. — ὅλως μὲν γὰρ οὕτως ἔστι τὸ ἄπειρον τῷ αἰεὶ ἄλλο καὶ ἄλλο λαμβάνεσθαι καὶ τὸ λαμβανόμενον μὲν αἰεὶ πεπερασμένον εἶναι, ἀλλ' αἰεὶ γέ ἕτερον καὶ ἕτερον. Ib. c. 7. φανερόν ὅτι ὡς ὅλη τὸ ἄπειρόν ἐστιν αἴτιον. De Gen. et Corr. i. 3; Met. xi. 10.

<sup>191</sup> Phys. i. 9; iii. 4; Met. iii. 4.

in contrast with Aristotle's aversion of an infinite as the unknowable, however it might, perhaps, have escaped him how greatly this admission was at issue with his own views, while he believed that although the infinite and unknowable exists only potentially, a knowledge of the actual is still possible.

But, although viewed on this side, the Aristotelian idea of matter is negative, it is, on the other hand, impossible not to perceive that a very positive view predominates in his exposition of phenomena. It is true, that while adhering strictly to this contrariety of the potential and the actual, he opposes the view of Plato and the Pythagoreans, that matter, or infinity, is the ground of evil; and maintains, rather, that it is the ground both of good and evil, and although, in truth, it is worse than form and actuality, inasmuch as it comprises within itself both good and evil, that nevertheless, besides sensible things themselves, nothing evil exists, as their ground, and that evil is neither eternal nor a ground of any thing, but is a result of the evolution of those contraries which are contained in matter.<sup>192</sup> But in his attempt to establish this

<sup>192</sup> Phys. i. 9. ὄντος γάρ τινος θείου καὶ ἀγαθοῦ καὶ ἰφετοῦ τὸ μὲν ἐναντίον αὐτῷ φαμέν εἶναι, τὸ δέ, ὃ πέφυκεν ἐφίσθαι καὶ ὀρέγεσθαι αὐτοῦ κατὰ τὴν αὐτοῦ φύσιν (sc. τὴν ἕλην). — ἀλλὰ τοῦτ' ἐστὶν ἡ ὕλη ὥσπερ ἂν εἰ θῆλυ ἄρρενος καὶ αἰσχροὺς καλοῦ· πλὴν οὐ καθ' αὐτὸ αἰσχροὺς, ἀλλὰ κατὰ συμβεβηκός, οὐδὲ θῆλυ, ἀλλὰ κατὰ συμβεβηκός. Met. ix. 9. ὅτι δὲ καὶ βελτίων καὶ τιμιωτέρα τῆς σπουδαίας δυνάμεως ἡ ἐνέργεια, ἐκ τῶνδε δῆλον. ὅσα γὰρ κατὰ τὸ δύνασθαι λέγεται, ταῦτόν ἐστι δυνατόν τάναντία. — τὸ μὲν οὖν δύνασθαι τάναντία ἅμα ὑπάρχει, τὰ δ' ἐναντία ἅμα ἀδύνατον. καὶ τὰς ἐνεργείας δὲ ἅμα ἀδύνατον ὑπάρχειν, οἷον ὑγιαίνειν καὶ κάμνειν. ὥστ' ἀνάγκη τούτων θάτερον εἶναι ἀγαθόν. τὸ δὲ δύνασθαι ὁμοίως ἀμφοτέρων ἢ οὐδέτερον· ἡ ἄρα ἐνέργεια βελτίων. ἀνάγκη δὲ καὶ ἐπὶ τῶν κακῶν τὸ τίλος καὶ τὴν ἐνέργειαν εἶναι χεῖρον τῆς δυνάμεως. τὸ γὰρ δυνάμενον ταῦτ' ἄμφω τάναντία. δῆλον ἄρα, ὅτι οὐκ ἐστὶ τὸ κακὸν παρὰ τὰ πράγματα.

point, matter presents itself no longer as a mere opposite to the true and the positive, but, on the contrary, assumes the nature of a positive. This, again, intertwines itself with the doctrines of the earlier philosophers. Finding that opposite grounds, form and matter, had been alleged as the principles of phenomena, Aristotle did not fail to notice the difficulty of explaining how opposite can work upon its opposite, or be affected by it. Moreover, there cannot be any opposite to the fundamental substance of all things; and out of this fundamental substance all must derive itself. On this account he refused to admit the opposition between form and matter as taught and understood by earlier philosophers, but rather posited three grounds, of which two are mutually opposed to each other, while the third lies at the ground of these two, and consequently assumes unto itself these opposite determinations.<sup>193</sup> In every becoming, a distinction must be made between that which becomes and what it becomes; the latter, however, is twofold; partly that which is the basis of that which becomes, and partly its contrary; for all become out of opposites; and if form, or shape, or order, be that which becomes, then formlessness, shapelessness, and disorder, must be the opposite out of which it becomes; whereas that which lies at the ground, is matter.<sup>194</sup> Accordingly, says Ari-

*ὕστερον γὰρ τῇ φύσει τὸ κακὸν τῆς δυνάμεως. οὐκ ἄρα οὐδ' ἐν τοῖς ἐξ ἀρχῆς καὶ τοῖς αἰδιότοις οὐθὲν ἔστιν οὔτε κακὸν οὔτε ἀμάρτημα οὔτε διεφθαρμένον.*

<sup>193</sup> Phys. i. 6.

<sup>194</sup> Ib. c. 7. *καὶ ἔστι μὲν τι τὸ γιγνόμενον, ἔστι δὲ τι, ὃ τοῦτο γίγνεται καὶ τοῦτο διττόν· ἢ γὰρ τὸ ὑποκείμενον ἢ τὸ ἀντικείμενον. λέγω δὲ ἀντικείμενον μὲν τὸ ἄμουνον, ὑποκείμενον δὲ τὸν ἄνθρωπον καὶ τὴν μὲν ἀσχημο-*

stotle, the principles of things are either two, form and matter, or three ; for that out of which aught becomes, exists not merely as the ground-matter, but also as opposed to form—as privation, (*στέρησις*); the former, indeed, absolutely, but the latter merely relatively.<sup>195</sup> According to this view, it is not matter, in and by itself, that is opposed to form, but merely privation, which is therefore regarded as a third ground.<sup>196</sup> Yet, in a certain respect, the prime matter is one with privation ; for matter admits privation, not, however, absolutely, or as its essence, but as something unessential to it ; and thus also the matter of non-being is not in itself, but merely *contingently*, whereas privation is absolutely non-being.<sup>197</sup> One might, perhaps, be disposed to regard the distinction thus made by Aristotle, between his own doctrine and the opinions of earlier philosophers, as unimportant, at least so far as Plato is concerned ; for, with Plato, matter is the non-being merely as sub-

σύνην καὶ τὴν ἀμορφίαν ἢ τὴν ἀταξίαν τὸ ἀντικείμενον, τὸν δὲ χαλκὸν ἢ τὸν λίθον ἢ τὸν χρυσὸν τὸ ὑποκείμενον.

<sup>195</sup> L. 1. ἔστι δὲ τὸ ὑποκείμενον ἀριθμῷ μὲν ἓν, εἶδει δὲ δύο· ὁ μὲν γὰρ ἀνθρωπος καὶ ὁ χρυσὸς καὶ ὅλως ἡ ὕλη ἀριθμητή· τόδε γάρ τι μᾶλλον καὶ οὐ κατὰ συμβεβηκὸς ἐξ αὐτοῦ γίγνεται τὸ γινόμενον· ἡ δὲ στέρησις καὶ ἡ ἐναντίωσις συμβεβηκός· ἔν δὲ τὸ εἶδος. — διὸ ἔστι μὲν ὡς δύο λεκτίον εἶναι τὰς ἀρχάς, ἔστι δὲ ὡς τρεῖς· καὶ ἔστι μὲν ὡς τάναντία, — ἔστι δ' ὡς οὐ.

<sup>196</sup> Met. xii. 2. τρία δὲ τὰ αἷτια καὶ τρεῖς αἱ ἀρχαί, δύο μὲν ἡ ἐναντίωσις, ἥς τὸ μὲν λόγος καὶ εἶδος, τὸ δὲ στέρησις, τὸ δὲ τρίτον ἡ ὕλη. The way in which Aristotle plays with words is very singular. Compare the following passages : Met. x. 4. πρώτη δ' ἐναντίωσις ἕξις καὶ στέρησις ἐστίν. Ib. v. 12. στέρησις ἐστίν ἕξις πῶς. Phys. ii. 1. ἡ δὲ γε μορφή καὶ ἡ φύσις διχῶς λέγεται· καὶ γὰρ ἡ στέρησις εἶδος πῶς ἐστίν.

<sup>197</sup> Phys. i. 9. ἡμεῖς γὰρ ὕλην καὶ στέρησιν ἕτερον εἶναι φάμεν· καὶ τούτων τὸ μὲν οὐκ ὄν εἶναι κατὰ συμβεβηκός, τὴν ὕλην, τὴν δὲ στέρησιν καθ' αὐτήν.

ject, but with Aristotle as predicate. Nevertheless, this distinction is not, in fact, so unimportant as at first sight would appear; for, besides that the Aristotelian notion of matter acquires thereby a more positive essence, it also tends to give greater distinctness to the view, that, in consequence of the unceasing connection between matter and privation, form can never attain to complete actuality in its combination with matter. On this account, matter is the cause of multiplicity; since forms are unable to express themselves in matter fully and at once, but are obliged to produce themselves under limits and constraint, different forms must be actualised in different matters. But although form is thus the ground of determinate multiplicity in the one matter, and divides the actual, still Aristotle regards form as absolutely one, and derives from matter the ground why form, which is one, should exhibit itself under many forms: for, if matter were one, like form, then the latter could only make, out of matter, one, according to actuality.<sup>198</sup> According to this view, matter is obviously an active cause, which efficiently enters into the formation of phenomena, notwithstanding that elsewhere it is regarded as merely passive.

As we have seen that the idea of matter gradually attained to greater distinctness in the progress of inquiry, we shall now find the same to be the case with respect to form. However, we shall not

<sup>198</sup> Met. xiii. 2. *ἐπεὶ διὰ τί ἄπειρα γίνετο, ἀλλ' οὐχ ἓν; ὁ γὰρ νοῦς εἷς. ὥστε εἰ καὶ ἡ ὕλη μία, ἐκεῖνο γίνετο ἐνεργεία, οὐ ἡ ὕλη ἢν δυνάμει.* Cf. ib. viii. 4; xii. 8. *ἀλλ' ὅσα ἀριθμῶ πολλά, ὕλην ἔχει. εἷς γὰρ λόγος πολλῶν οἶον ἀνθρώπων.*



be able to review the full acceptance of this term, until we shall have investigated Aristotle's doctrine of the other grounds of sensible things besides matter and form. When he considered sensible objects to be composed of matter and form, and the definition to consist of genus and difference he might have asserted that these are held together by nature, and constitute a natural unity; the one indicating what is potential, and the other what is actual in the same species. This, however, would still leave undecided the question, what that is by which they are held together, and by which the potential becomes actual. This question is that concerning the moving causes;<sup>199</sup> for Aristotle calls the manner in which form and matter combine, a motion in the wide sense in which the term was employed by the earlier philosophers. Matter can not move itself, but is set in motion by something without it;<sup>200</sup> when aught comes into being, it is not produced by itself, but through something else.<sup>201</sup> Consequently, the inquiry into the nature of entity, which is composed of form and matter, attaches itself to that of the moving cause.

Now motion is regarded by Aristotle as the transition from the potential to the actual, but in a certain respect, it is also of itself an actuality, although only an actuality of something material, so far as it is material, i. e. so far as it is potential. The actuality of brass, for instance, so far forth as brass, is

<sup>199</sup> Met. viii. 6. καὶ τὸ δυνάμει καὶ τὸ ἐνεργείᾳ ἓν πῶς ἴστιν. ὥστε αἰτίον οὐθὲν ἄλλο πλὴν εἰ τι ὡς τὸ κινήσαν ἐκ δυνάμεως εἰς ἐνέργειαν.

<sup>200</sup> Ib. i. 3. οὐ γὰρ δὴ τό γε ὑποκείμενον αὐτὸ ποιεῖ μεταβάλλειν ἑαυτό.

<sup>201</sup> Ib. iv. 5. καὶ εἰ γίγνεται, ἐξ οὗ γίγνεται καὶ ὑφ' οὗ γεννᾶται.

not motion, but only so far as it exists potentially, since it is only through motion that the potential attains to actuality.<sup>202</sup> By these explanations, Aristotle seeks to get rid of the difficulties which present themselves in the idea of motion; he regards it as a non-being, or as something indeterminate, on the ground that it cannot be ascribed either to that which is actually, nor to that which is potentially. The ground of this difficulty, however, is simply the fact that it is an imperfect actuality, actual and yet not actual, inasmuch as the potential of which it is an actuality, has not yet attained to actuality.<sup>203</sup> This evidently involves the idea, that it is impossible to conceive motion otherwise than as a mean between the potential and the actual.

Now the potential has not in itself the power to realise itself; consequently motion cannot result out of it. It is true, that it is possible to conceive essences having in themselves the source of their own motion, but even in these the moving is distinct from the moved.<sup>204</sup> As then the ground of

<sup>202</sup> Met. xi. 9. τὴν τοῦ δυνάμει, ἣ τοιοῦτόν ἐστιν, ἐνέργειαν λέγω κίνησιν. — λέγω δὲ τὸ ἢ ὧδε· ἐστὶ γὰρ ὁ χαλκὸς δυνάμει ἀνδριάς· ἀλλ' ὅμως οὐχ ἡ τοῦ χαλκοῦ ἐντελέχεια, ἣ χαλκός, κίνησίς ἐστιν. οὐ γὰρ ταῦτό χαλκῶ εἶναι καὶ δυνάμει τινί, ἐπεὶ εἰ ταῦτόν ἦν ἀπλῶς κατὰ τὸν λόγον, ἦν ἂν ἡ τοῦ χαλκοῦ ἐντελέχεια κίνησίς τις. οὐκ ἐστὶ δὲ ταῦτό. — ἐπεὶ δὲ οὐ ταῦτόν, — ἡ τοῦ δυνατοῦ, ἣ δυνατόν, ἐντελέχεια κίνησίς ἐστιν. Phys. iii. 1 ; viii. 1.

<sup>203</sup> Met. i. 1. τοῦ δὲ δοκεῖν ἀόριστον τὴν κίνησιν εἶναι αἴτιον, ὅτι οὐτ' εἰς δύναμιν τῶν ὄντων, οὐτ' εἰς ἐνέργειαν ἐστὶ τιθῆναι αὐτήν. οὔτε γὰρ τὸ δυνατόν ποσὸν εἶναι κινεῖται ἐξ ἀνάγκης, οὔτε τὸ ἐνεργεῖα ποσόν. ἢ τε κίνησις ἐνέργεια μὲν δοκεῖ εἶναι τις, ἀτελὴς δὲ· αἴτιον δ' ὅτι ἀτελὴς τὸ δυνατόν, οὐ ἐστὶν ἐνέργεια· — ὥστε λείπεται τὸ λεχθὲν εἶναι καὶ ἐνέργειαν καὶ μὴ ἐνέργειαν τὴν εἰρημένην. Cf. Phys. iii. 2.

<sup>204</sup> Phys. vii. 1 ; viii. 5.

motion is not contained in matter we must look for it in form, and the moving cause must be something existing actually.<sup>205</sup> Thus did Aristotle attempt to solve the difficulties which had grown out of the question, whether the active and the passive must resemble each other. Things perfectly similar and indistinguishable cannot possibly affect, or be affected by, each other, else how could one be more powerful than the other. And as little can things, perfectly dissimilar and distinct, influence each other, for that which has not an opposite in the same genus, cannot, except accidentally, suffer aught from any other. Now from this it follows that active and passive must resemble each other in kind, and yet in species be dissimilar and opposite. With Aristotle, 'in kind' is equivalent with 'in matter', and 'in species' with 'in form,' and the contrariety here will ultimately be form and privation, so that in general it may be said, that the opposition between the passive or the moved, and the active or moving, reduces itself to that between that which has not as yet form, but which is matter for form, and that which already possesses form.<sup>206</sup> If, therefore, the substance, as composed of form and matter, is to come into being, there must be existing, antecedently to its production, a sub-

<sup>205</sup> Phys. viii. 5. τὸ δὲ κινεῖν ἤδη ἐνεργείᾳ ἐστίν. De An. ii. 5. πάντα δὲ πάσχει καὶ κινεῖται ὑπὸ τοῦ ποιητικοῦ καὶ ἐνεργείᾳ ὄντος.

<sup>206</sup> De Gen. et Corr. i. 7. τό τε γὰρ ὅμοιον καὶ τὸ πάντῃ πάντως ἀδιάφορον ἐβλογον μὴ πάσχειν ὑπὸ τοῦ ὁμοίου μηθέν· τί γὰρ μᾶλλον θάτερον ἴσται ποιητικὸν ἢ θάτερον; — τό τε παντελῶς ἕτερον καὶ μηδαμῇ ταύτην ὡσαύτως· — οὐκ ἐξίστησι γὰρ ἑαυτὰ τῆς φύσεως ὅσα μὴτ' ἐναντία, μὴτ' ἐξ ἐναντίων ἐστίν. — ἀνάγκη καὶ τὸ ποιοῦν καὶ τὸ πάσχον τῷ γένει μὲν ὅμοιον εἶναι καὶ ταῦτό, τῷ δ' εἶδει ἀνόμοιον καὶ ἐναντίον. — ἴστι μὲν γὰρ ὡς ἡ ὕλη πάσχει, ἴστι δὲ ὡς τὸ ἐναντίον.

stance having its form, which is the moving cause and produces that substance.<sup>207</sup> From this it is clear also that form or actuality must exist prior to matter or potentiality, at least notionally, since otherwise it would be impossible for any actuality to arise out of the merely potential, or matter.<sup>208</sup>

As then, Aristotle seeks for every motion a pre-existing moving cause, which is already something actual, he must naturally be carried into infinity, and consequently, driven to assume that motion is without beginning. In order that motion may take place, it is necessary that something moveable, and something possessing a faculty of moving, should be already existing, and it is inconceivable that the two should exist without concurring in reciprocal action. Consequently, either must motion have always been, or else, previous to all motion, the moveable and the potentiality of setting in motion must have come into being; such a generation, however, would itself be a motion, and there would, in that case, have been a motion before motion, which is impossible. Therefore it only remains, that we admit that motion is without beginning.<sup>209</sup> This reasoning, is nothing more than an attempt to find a cause for every existing state or condition, as becomes perfectly clear

<sup>207</sup> Met. vii. 9. ἀλλ' ἴδιον τῆς οὐσίας ἐκ τούτων λαβεῖν ἔστιν, ὅτι ἀνάγκη προϋπάρχειν ἑτέραν οὐσίαν ἐντελεχείᾳ οὖσαν, ἢ ποιῆ.

<sup>208</sup> Met. xii. 7.

<sup>209</sup> Phys. viii. 1. εἰ μὲν τοίνυν ἐγένετο τῶν κινητῶν [καὶ κινητικῶν] ἕκαστον, ἀναγκαῖον πρότερον τῆς ληφθείσης ἄλλην γενέσθαι μεταβολὴν καὶ κίνησιν, καθ' ἣν ἐγένετο τὸ δυνατόν κινηθῆναι ἢ κινῆσαι. εἰ δ' ὄντα προϋπῆρχεν αἰ κινήσεως μὴ οὐσης, ἄλογον μὲν φαίνεται. Bekker has rejected *κινητικῶν*. One MS. has *κινητικῶν* for *κινητῶν*. Simplicius appears to have read both.

when we consider that opinion of Aristotle, that if rest had existed antecedently to all motion, it would be necessary to find a cause why rest, which is merely the privation of all motion, should have existed prior to motion; and then, that this cause must be supposed annihilated before the first motion could arise, which could only be effected through some other motion and some other moving cause, so that on this supposition, we should again have a motion subsisting prior to all motion.<sup>210</sup> The same result appeared, to Aristotle, to follow from the proposition that time is unbegotten; for time can neither exist nor be conceived without a *now*, or the present, which is an intermediate point between time past and time future; consequently every *now* invariably implies a past, and as this holds good of every moment of time, it is impossible to conceive its beginning. Now with Aristotle, the infinity of motion followed immediately from the infinity of time, time being merely a particular determination of motion.<sup>211</sup> In this view, Aristotle must have maintained the infinity of motion, not only 'ex parte ante,' but likewise 'ex parte post;' and the same arguments are adduced to support the endlessness of time as were alleged to

<sup>210</sup> L. I. εἰ γὰρ τῶν μὲν κινητῶν ὄντων, τῶν δὲ κινητικῶν, ὅτε μὲν ἔσται τι πρῶτον κινεῖν, τὸ δὲ κινούμενον, ὅτε δὲ οὐθέν, ἀλλ' ἡρεμεῖ, ἀναγκαῖον τοῦτο μεταβάλλειν πρότερον· ἣν γὰρ τι αἴτιον τῆς ἡρεμίας· ἡ γὰρ ἡρέμεις στέρησις τῆς κινήσεως· ὥστε πρὸ τῆς πρώτης μεταβολῆς ἔσται μεταβολὴ προτέρα.

<sup>211</sup> L. I. εἰ οὖν ἀδύνατόν ἐστι καὶ εἶναι καὶ νοῆσαι χρόνον ἄνευ τοῦ νῦν, τὸ δὲ νῦν ἐστὶ μεσότης τις καὶ ἀρχὴν καὶ τελευτὴν ἔχον ἡμᾶς, ἀρχὴν μὲν τοῦ ἰσομένου χρόνου, τελευτὴν δὲ τοῦ παρελθόντος, ἀνάγκη αἰεὶ εἶναι χρόνον. — ἀλλὰ μὴν εἶγε χρόνον, φανερόν ὅτι ἀνάγκη εἶναι καὶ κίνησιν, εἴπερ ὁ χρόνος πάθος τι κινήσεως.

prove that time never had a beginning.<sup>212</sup> It is scarcely necessary to observe, that this doctrine is closely connected with the view that matter is an eternal principle of things. In the former, however, we have only a stronger admission than was ever made in the latter, that all our investigations into phenomena must remount up to infinity, for every single actuality has its ground in an infinite series of antecedent developments, in the same manner as each is followed by a similar series.

Now with the notion of a moving cause, that of the design, or final cause, is, in the closest manner, combined. For the moving cause indicates the beginning, but the design the end of motion; so that the moving cause and the final cause are opposed to each other in a contrariety similar to that of matter and form.<sup>213</sup> In this respect Aristotle duly observes the characteristic principle of the Socratic school, and teaches that a design must be ascribed to every becoming, and that all motion tends to good, even though it must occasionally be that a matter happens merely from accident, i. e. from some cause which operates merely contingently; for not only those events which are planned by reflection and intelligence, and effected by art, have an end and design, but also every natural event.<sup>214</sup> The investigation of the final causes of all matters and events appears to him to be the

<sup>212</sup> L. 1.

<sup>213</sup> Met. i. 3. *τρίτην δὲ ὅθεν ἡ ἀρχὴ τῆς κινήσεως, τετάρτην δὲ τὴν ἀντικειμένην αἰτίαν ταύτην, τὸ οὐ ἔνεκα καὶ τὰγαθόν (τέλος γὰρ γενέσεως καὶ κινήσεως πάσης τοῦτ' ἔστι).* Ib. iii. 2.

<sup>214</sup> Anal. Post. ii. 11. *ὥστε τὸ τέλος ἀγαθὸν ἔνεκά του γίγνεται καὶ ἡ φύσις ἢ τίχνη ἀπὸ τύχης δ' οὐθὲν ἔνεκά του γίγνεται.*

highest problem of philosophy, for whatever comes to pass is brought about for some end or aim; and therefore all other sciences must follow like slaves the science of the end and the good, and must not venture to oppose themselves to its dictates.<sup>215</sup> On this account, the final cause is called by Aristotle the first cause, which must be determined before all others.<sup>216</sup>

The question, wherein does the end of all becoming consist, must, when it refers to sensible objects, derive its answer from the preceding observations. For motion has to bring about the union of matter with form, and therefore the essence itself. On this account, Aristotle adopted the Platonic doctrine, that all becoming is for the sake of the substance or essence;<sup>217</sup> and, inasmuch as all entity is grounded in the essence, but good is the end, therefore being also is the end, and it is better than non-being.<sup>218</sup> This description, likewise, shows how, with Aristotle, all is striving to pass from potentiality to the actuality which is involved in the potential. As however he held that actuality is brought about by the medium of motion, it is necessarily closely connected with motion itself; and, since the series of motion proceeds on to infinity, the end and the actuality must lie in motion. Accordingly, Aristotle makes a very

<sup>215</sup> Met. iii. 2. ἡ μὲν γὰρ ἀρχικωτάτη καὶ ἡγεμονικωτάτη καὶ ἡ ὥσπερ δούλας οὐδ' ἀντειπεῖν τὰς ἄλλας ἐπιστήμας δίκαιον, ἡ τοῦ τέλους καὶ τὰ γὰρ τοιαύτη· τούτου γὰρ ἕνεκα τὰλλα. Ib. i. 2.

<sup>216</sup> Phys. ii. 9; de Part. An. i. 1.

<sup>217</sup> De Gen. An. v. 1. τῇ γὰρ οὐσίᾳ ἡ γένεσις ἀκολουθεῖ καὶ τῆς οὐσίας ἕνεκά ἐστιν, ἀλλ' οὐχ αὕτη τῇ γενέσει.

<sup>218</sup> De Gen. et Corr. ii. 10. βέλτιον δὲ τὸ εἶναι ἢ τὸ μὴ εἶναι.

broad distinction between two kinds of activities, of which one has its end and completion in itself, while the other has not. This he illustrates in his usual manner by examples. To the former kind belong seeing, cognition, perception of pleasure, life, and felicity: in these there is at once both an end and its fulfilment, since to have seen is the same with to see, and to have known with to know, and every one at the same time lives and has lived, is happy and has been happy. With the other species of activities it is different, for he who is learning has not yet learned, he who is convalescent is not yet perfectly recovered, and generally, that which is being moved and is becoming has not as yet become nor is moved; these activities have their end and fulfilment extrinsecal to themselves. Now every activity of the former kind Aristotle calls an energy, and what he understood by this term is clear from the instances above cited; the latter he calls motion or imperfect energies, transitions from the potential into the actual, whereas in an energy both end and actuality are found.<sup>219</sup> This is an essential distinction in Aristotle's doctrine. For as he places the essence of things in their realisation, which however results from the

<sup>219</sup> Met. ix. 6. *πᾶσα γὰρ κίνησις ἀτελής, ἰσχυρασία, μάθησις, βᾶδις, οἰκοδόμησις· αὗται δὲ κινήσεις καὶ ἀτελεῖς γε. οὐ γὰρ ἅμα βάδιζει καὶ βεβᾶδικεν, οὐδ' οἰκοδομεῖ καὶ ψικοδόμηκεν, οὐδὲ γίγνεται καὶ γίγονεν καὶ κινεῖται καὶ κεινέκεν.* — *ἴωρακε δὲ καὶ ὄρῳ ἅμα τὸ αὐτὸ καὶ νοεῖ καὶ νενόηκε· τὴν μὲν οὖν τοιαύτην ἐνέργειαν λέγω, ἐκείνην δὲ κίνησιν· τὸ μὲν οὖν ἐνέργειά τί τί ἐστι καὶ ποῖον, ἐκ τούτων καὶ τῶν τοιούτων δῆλον ἡμῖν ἔστω.* Top. vi. 8; Eth. Nic. vii. 13; Phys. viii. 5; de An. ii. 5. In the passage quoted from the Topics, *ἐνεργεῖν* is distinguished from *ἐνεργηέναι*, but only so far as the latter indicates that the former is past. Otherwise, the *ἐνεργεῖν* is contained in the *ἐνεργηέναι*.



potential solely by the means of motion, and maintains itself thereby, he must of course distinguish the as yet incomplete existence of things from that wherein they are actually, or that towards which their potentiality tends; and their actuality accordingly appears to him as an activity proceeding out of potentiality, and which is not motion, but rest in the attained end or design.<sup>220</sup>

This distinction, which Aristotle draws between motion and energy, opens to us a deep insight into the spirit of his whole theory. Here again he appears to be striving hard to attach the truth of things to the transient multiplicity of phenomena. On this account the actuality, of which he seeks to gain a knowledge, and the end, are in truth something distinct from motion and becoming, but nevertheless regarded by him as intimately allied to them. For motion itself is an energy, although as yet incomplete, and energy combines within itself both the past motion and its completion: it is at once to know and to have known, to live and to have lived. In the very word energy it is at once implied that the truth and end of phenomena is not distinct from becoming, but that it is involved even in becoming itself, as the end and aim of its becoming, or as the supra-sensible in the sensible. In this sense the energy or entelechy of Aristotle strongly contrasts itself to the idea of Plato, for

<sup>220</sup> Phys. vii. 3. τῆς ἐνεργείας οὐκ ἔστι γένεσις. — εἰς δὲ τὸ ἡρμεῖν οὐκ ἔστι γένεσις. There is therefore an energy for motion, and also for the absence of motion. Eth. Nic. vii. 15. οὐ γὰρ μόνον κινήσεώς ἐστιν ἐνέργεια, ἀλλὰ καὶ ἀκινήσεως. This is true of the divine energy; for immoveable things, the absence of motion is rest. Phys. iii. 2.

while the latter is conceived as a self-subsisting and permanent entity, and apart from all becoming, the former is a ground of becoming, and the truth and real in all becoming. Accordingly, we here again meet with the same difference of opinion, which divided the pre-Socratic philosophy, arising out of the question, whether the permanent, or the becoming, is the truth of things; although, as it now presents itself, it has greatly gained in completeness of form and in abstraction from all that is merely sensible.

Here, then, we have the four species of causes which Aristotle usually places together as equally necessary for the full explanation of phenomena, the material, the formal, the moving, and the final.<sup>221</sup> These four causes co-operate in every sensible object. For nothing which has any kind of becoming, can be without matter, and a form must be produced in every actual thing, which cannot be except by a moving cause; and, lastly, to remount to the first cause, all is effected for some end, for accident and chance are not causes simply, but merely incidentally.<sup>222</sup> At times, undoubtedly, it would appear as if Aristotle supposed the existence of objects in which some one of these causes might be wanting; but by these, however, he did not understand actual substance, but merely something which is a property of substance.<sup>223</sup> On the contrary, in the case of every physical substance, i. e.

<sup>221</sup> An. Post. ii. 11; Met. i. 3; Phys. ii. 3, 7; de Gen. An. i. 1.

<sup>222</sup> Phys. ii. 5. *καὶ ἔστιν ὡς οὐθὲν ἀπὸ τύχης δόξειεν ἂν γίγνεσθαι* — *ἔστι μὲν γὰρ ὡς γίγνεται ἀπὸ τύχης κατὰ συμβεβηκός γὰρ γίγνεται καὶ ἔστιν αἴτιον ὡς συμβεβηκός ἡ τύχη, ὡς δ' ἀπλῶς οὐδενός.*

<sup>223</sup> Ib. viii. 4, 5.

subject to becoming, all the four causes must be investigated before a complete understanding of their nature can be attained.<sup>224</sup>

And although, therefore, these four causes must be distinguished from each other, they must not be regarded separately as independent causes of anything; indeed, they partly stand in such a relation to each other, that they indicate only one and the same object, and are only distinct according to the several points of view from which the same object is contemplated. This is to be noticed especially in the case of the formal and the final causes, which Aristotle frequently maintains to be one and the same,<sup>225</sup> and even carries this opinion so far as at times to enumerate only three causes, the end and the form being given as identical.<sup>226</sup> It is necessary here to remember that form indicates the pure essence, such as, in and by itself,—apart from any material substratum, which contains nothing more than a capacity for being,—is an actuality. Consequently, he calls the form, that which a thing is in truth, and apart from matter (τὸ τί ἦν εἶναι); it is the notion of the essence (λόγος τῆς οὐσίας,) or the essence simply.<sup>227</sup> Now we have already seen that Aristotle makes motion and becoming to be

<sup>224</sup> Ib. viii. 4. ὅταν δὴ τις ζητῇ, τί τὸ αἰτιον, ἐπεὶ πλεοναχῶς τὰ αἴτια λέγεται, πάσας δεῖ λέγειν τὰς ἐνδεχομένας αἰτίας· ὅλον ἀνθρώπου τίς αἰτία ὥς ἔλθῃ; ἄρα τὰ καταμήνια; τί δ' ὥς κινεῖται; ἄρα τὸ σπέρμα; τί δ' ὥς τὸ εἶδος; τὸ τί ἦν εἶναι. τί δ' ὥς οὐ ἔνεκα; τὸ τέλος. — περὶ μὲν οὖν τὰς φυσικὰς οὐσίας καὶ γεννητὰς ἀνάγκη οὕτως μετεῖναι, εἰ τις μίττεισιν ὁρθῶς, εἴπερ ἄρα αἰτιά τε ταῦτα καὶ τοσαῦτα καὶ δεῖ τὰ αἴτια γνωρίζειν.

<sup>225</sup> L. l.; de Gen. An. i. 1. ὅ τε γὰρ λόγος καὶ τὸ οὐ ἔνεκα ὥς τέλος ταῦτόν. Phys. ii. 7; de Gen. et Corr. ii. 9. ὥς δὲ τὸ οὐ ἔνεκεν ἡ μορφή καὶ τὸ εἶδος, τοῦτο δ' ἐστὶν ὁ λόγος ὁ τῆς ἐκάστου οὐσίας.

<sup>226</sup> De Gen. et Corr. l. l.

<sup>227</sup> Met. i. 3; viii. 4; Anal. Post. ii. 11; de Gen. An. l. l.

merely a relation, which acquires a significance only by being placed in reference to the end. Here, however, we find that the end which is to be attained by becoming, is nothing else than the essence, free from matter, or the pure form; which, indeed, in sensible things, is invariably combined with matter, but which, nevertheless, must be distinguished from matter in the same way as the end must from the means and condition of its attainment. Accordingly, nature, as a system of becoming, is nothing else than the way to nature, which is the 'what' (quid) and the form; and, accordingly, he calls the form and the notion of the pure essence, employing a Platonic term, the paradigm or pattern towards which nature tends.<sup>229</sup> Nevertheless, the word is employed by Aristotle in a very different sense from that which Plato gave it, for with him, as already shown, the end exists already, in the realising activity—in the energy. It is true, he distinguishes between those ends which are comprised in this efficient activity, and those which indicate certain works lying without the activity itself; <sup>230</sup> nevertheless, it is evident that these works can only be called ends in a very subordinate sense, since this designation is only relative to their use, and they merely serve as instruments, which a right activity must employ in order to attain the true

<sup>228</sup> Phys. ii. 1. *ἔτι δ' ἡ φύσις ἢ λεγομένη ὡς γένεσις ὁδὸς ἐστὶν εἰς φύσιν.*  
— *ἀλλὰ τὸ φερόμενον ἐκ τινος εἰς τι ἔρχεται ἢ φύεται· εἰς τί οὖν φύεται;*  
*οὐχὶ ἐξ οὗ, ἀλλ' εἰς ὅ. ἢ ἄρα μορφή φύσις.* Met. iv. 2. *ὁδὸς εἰς οὐσίαν.*

<sup>229</sup> Phys. ii. 3. *τὸ εἶδος καὶ τὸ παράδειγμα· τοῦτο δ' ἐστὶν ὁ λόγος ὁ τοῦ τί ἦν εἶναι.*

<sup>230</sup> Eth. Nic. i. 1. *διαφορὰ δέ τις φαίνεται τῶν τελῶν· τὰ μὲν γάρ εἰσιν ἐνέργειαι, τὰ δὲ παρ' αὐτὰς ἔργα τινά.*

end; <sup>231</sup> in the same way as it is evident that in all such works the activity itself is comprised.<sup>232</sup> On this account, also, Aristotle calls the end and the work simply the energy,<sup>233</sup> and as he invariably conceives the essence and form as in opposition to the merely material potentiality, he naturally regards the essence and the form as the energy.<sup>234</sup> According to this view, therefore, the perfect essence of a thing, which is one with its perfect activity, appears to be also its proper end: this is the best that it can accomplish—this is the good after which, as its end, all strives in order to be in the full activity of its being; man himself, even, is in a certain manner an end, inasmuch as his essence dwells within him in full activity.<sup>235</sup>

This naturally leads to a more precise determination, an enlargement, indeed, to a complete modification of the idea of form, when understood in Aristotle's sense, and compared with what is usually designated as form. For, in the first place, it is clear that it does not denote any abiding, and, as it were, persisting principle in things; and, still less, anything, as it were, outwardly impressed upon them, notwithstanding that the illustrations which Aristotle draws from a statue, or other

<sup>231</sup> L. 1.

<sup>232</sup> Met. ix. 8. ὅσων μὲν οὖν ἕτερόν τι ἐστὶ παρὰ τὴν χρῆσιν τὸ γιγνόμενον, τούτων μὲν ἡ ἐνέργεια ἐν τῷ ποιουμένῳ ἐστίν.

<sup>233</sup> L. 1. τέλος δ' ἡ ἐνέργεια. — τὸ γὰρ ἔργον τέλος ἡ δ' ἐνέργεια τὸ ἔργον. Magn. Mor. ii. 12. ἐστὶ μὲν οὖν τὸ αὐτὸ τέλος τε καὶ ἐνέργεια καὶ οὐκ ἄλλο τι παρὰ τὴν ἐνέργειαν τέλος.

<sup>234</sup> Met. I. 1. ὥστε φανερόν ὅτι ἡ οὐσία καὶ τὸ εἶδος ἐνέργειά ἐστιν.

<sup>235</sup> Phys. ii. 2. βούλεται γὰρ οὐ πᾶν εἶναι τὸ ἔσχατον τέλος, ἀλλὰ τὸ βέλτιστον. — ἰσμέν γάρ πως καὶ ἡμεῖς τέλος. Met. v. 16. ἕκαστον γὰρ τότε τέλειον καὶ οὐσία πᾶσα τότε τέλεια, ὅταν κατὰ τὸ εἶδος τῆς οἰκείας ἀρετῆς μὴθην ἰλλείπῃ μόνον τοῦ κατὰ φύσιν μεγέθους.

works of art, might easily tend to such misapprehension. On the contrary, the form must, it is true, be produced by an outward moving cause of things, but, nevertheless, it must be contained in them potentially, and constitute their intrinsic essence, and must be regarded as their proper and peculiar virtue, their perfect activity. Now, form being nothing inert, or extrinsecal to things, it cannot be conceived to be corporeal; on the contrary, the corporeal belongs rather to matter. On this ground Aristotle attacked Democritus, who reduced the essence and form of things to the corporeal figure, which, however, is very far from constituting that which is the object of the question, what a particular thing is. For else, the lifeless body, which still retained the form of man, would be a man; and a wooden hand would not only be called after a real hand, but also possess its essence. But that alone is truly a hand, which can perform the functions of a hand.<sup>236</sup> Consequently, the form of a living substance is the soul, by which the work of life is performed, rather than the body, which is merely matter.<sup>237</sup> Thus, then, in living substances at least, the idea of form passes far beyond that of the simply corporeal; and that something similar is to be understood in the case of lifeless objects, may

<sup>236</sup> De Part. An. i. 1. καίτοι καὶ ὁ τεθνεὺς ἔχει τὴν αὐτὴν τοῦ σχήματος μορφήν, ἀλλ' ὅμως οὐκ ἔστιν ἄνθρωπος. ἔτι δ' ἀδύνατον εἶναι χεῖρα ὀπωσοῦν διακειμένην, οἷον χαλκῇ ἢ ξυλίνῃ, πλὴν ὁμωνύμως, ὥσπερ τὸν γεγραμμένον ἰατρόν. οὐ γὰρ δυνήσεται ποιῆν τὸ ἑαυτῆς ἔργον, ὥσπερ οὐδ' αὐλοὶ λίθινοι τὸ ἑαυτῶν ἔργον, οὐδ' ὁ γεγραμμένος ἰατρός. ὁμοίως δὲ τούτοις οὐδὲ τῶν τοῦ τεθνηπότος μορίων οὐθὲν ἔτι τῶν τοιοῦτων ἐστὶ, λέγω δ' οἷον ὀφθαλμός, χεῖρ. Met. vii. 10, 11.

<sup>237</sup> Met. vii. 11. ἡ μὲν ψυχὴ οὐσία ἡ πρώτη, τὸ δὲ σῶμα ἕλη. De Part. An. i. 1.; de An. ii. 4.

be inferred from the position, that in these the shaping activity in the work is the form. This point, however, cannot be brought out in all its clearness until we have further examined the doctrine of the mutual connection of these several causes.

According to Aristotle, not merely are the essence and end one, but the moving cause, likewise, often coincides with them; for the first cause is of the same nature and form as the moved; man produces man, and every form is produced from a corresponding form of the same kind.<sup>238</sup> This agrees with the mode in which Aristotle explains the fact of becoming, by supposing that an actual form produces the same form in a matter which potentially is similar to the form. This he endeavours to illustrate by a number of instances. First of all, in natural things it is clear that the power of like produces like, for man propagates man, and warmth, warmth; and even in those things which are created by human art and skill, the same holds good, for the form must exist antecedently in the mind of the maker before that he can realise it by his work. For instance, the form of the statue existing previously in the understanding of the statuary is the cause of the motion by which it is brought into being. Thus, too, health pre-exists in the mind of the physician, and becomes therein the moving cause whereby it arises in the sick frame

<sup>238</sup> Phys. ii. 7. *ἔρχεται δὲ τὰ τρία εἰς τὸ ἐν πολλάκις· τὸ μὲν γὰρ τί ἐστὶ καὶ τὸ οὐ ἕνεκα ἔν ἐστι· τὸ δὲ ὅθεν ἡ κίνησις πρῶτον τῷ εἶδει ταῦτὸ τοῦτοισι· ἄνθρωπος μὲν γὰρ ἄνθρωπον γεννᾷ καὶ ὅλως ὅσα κινούμενα κινεῖ.* The restriction which is contained in *πολλάκις* is afterwards removed by the general argument. This is a peculiarity of the Aristotelian mode of expression, and occurs frequently.

of the patient, and so, in a certain manner, the healing art is the form of health, and architecture of the house. Aristotle proceeds so far in this direction, as at times to give no more than three causes of things, and to consider the moving cause and the form as identical. Nevertheless, we must not here neglect the distinction, that the moving cause of a thing in another matter is the same as the form of the thing, or, as it is otherwise expressed, that the moving cause is, indeed, in nature and in form, but still not in number, similar to the essence of a thing.<sup>239</sup>

That now, in this combination of the notion of form with the moving cause, the former invariably signifies some intrinsic activity, is most clearly shown by the examples which are derived, without exception, from the intellectual activity. For in these the external form is merely the copy of the rational end, which, originally planned within, is subsequently fashioned without. The same, how-

<sup>239</sup> Met. ix. 8. τὸ τῷ εἶδει τὸ αὐτὸ ἐνεργοῦν πρότερον, ἀριθμῷ δ' οὐ. λεγὼ δὲ τοῦτο, ὅτι τοῦδε μὲν τοῦ ἀνθρώπου τοῦ ἤδη ὄντος κατ' ἐνέργειαν καὶ τοῦ σίτου καὶ τοῦ ὀρῶντος πρότερον τῷ χρόνῳ ἢ ὕλῃ καὶ τὸ σπέρμα καὶ τὸ ὄρατικόν, ἃ δυνάμει μὲν ἔστιν ἄνθρωπος καὶ σίτος καὶ ὀρῶν, ἐνεργείᾳ δ' οὐκ ἔστι. — εἰρηται δ' ἐν τοῖς περὶ οὐσίας λόγοις, ὅτι ἅπαν τὸ γινόμενον γίγνεται ἐκ τινός τι καὶ ὑπὸ τινος καὶ τοῦτο τῷ εἶδει τὸ αὐτό. Ib. xiii. 4. ἐπεὶ δὲ τὸ κινεῖν ἐν μὲν τοῖς φυσικοῖς ἀνθρώποις ἄνθρωπος, ἐν δὲ τοῖς ἀπὸ διανοίας τὸ εἶδος ἢ τὸ ἐναντίον, τρόπον τινὰ τρία ἂν εἴη, ὡδὶ δὲ τέτταρα· ὑγεία γάρ πως ἢ ἱατρικὴ καὶ οἰκίας εἶδος ἢ οἰκοδομικὴ καὶ ἄνθρωπος ἄνθρωπον γεννᾷ. In this passage ἐναντίον stands for στέρησις, which, in a certain respect, is a form, and a cause of motion, but, more properly, the opposite of form. In works of art, apparently, this is different. Met. vii. 7. ὥστε συμβαίνει τρόπον τινὰ τὴν ὑγίειαν ἐξ ὑγείας γίνεσθαι καὶ τὴν οἰκίαν ἐξ οἰκίας, τῆς ἀνευ ὕλης τὴν ἔχουσας ὕλην. But, even in these cases, we must suppose the moving cause in a species of matter, which is, however, dissimilar to the moved matter. Cf. de Gen. et Corr. i. 7. ὅσα γὰρ μὴ ἔχει τὴν αὐτὴν ὕλην, ποιεῖ ἀπαθῆ ὄντα, οἷον ἡ ἱατρικὴ. It is only where the pure νοῦς is active, that matter is entirely absent; of which we shall have afterwards to speak.



ever, is also true of natural productions, since these, too, are supposed to be homogeneous with the moving power, which, working out of one matter, merely produces a similar working power in another. Hereby, we have all individual differences reduced, without exception, to matter, and whatever in phenomena is not common to an entire class, and only shows itself in an especial manner, and in individuals, is not to be supposed to originate from the final cause, but from matter.<sup>240</sup> The form of things is its species, or class, and the species is the ever-moving mover, which pervades all natural objects. In living creatures, all, according to Aristotle, tends towards the good and the divine; and, although in their individual existence, or in number, they are perishable, and consequently cannot participate in eternity, they nevertheless strive to participate therein as much as possible, that is, in species; and, though they do not transmit the eternal, they, nevertheless indeed, leave behind them a similar, which, however, is only specifically, and not numerically, the same.<sup>241</sup> Moreover, even the perishable elementary bodies are invariably striving to assimilate themselves to the imperishable; for they are always in activity, and in and by themselves, and within themselves, they

<sup>240</sup> De Gen. An. v. 1. *περὶ δὲ τούτων καὶ τῶν τοιούτων πάντων οὐκέτι τὸν αὐτὸν τρόπον δεῖ νομίζειν εἶναι τῆς αἰτίας. ὅσα γὰρ μὴ τῆς φύσεως ἔργα κοινῇ, μηδ' ἴδια τοῦ γένους ἐκάστου, τούτων οὐθέν ἕνεκά του τοιοῦτον οὐτ' ἐστὶν οὔτε γίνεται· ὀφθαλμὸς γὰρ ἕνεκά του, γλαυκὸς δ' οὐχ ἕνεκά του, πλὴν ἂν ἴδιον ᾗ τοῦ γένους τοῦτο τὸ πάθος.*

<sup>241</sup> De An. ii. 4. *ἔπει οὖν κοινωνεῖν ἀδυνατεῖ τοῦ αἰεὶ καὶ τοῦ θείου τῇ συνεχείᾳ, διὰ τὸ μηδὲν ἐνδέχασθαι τῶν φθαρτῶν ταῦτ' καὶ ἐν ἀριθμῷ διαμένειν, ᾗ δύναται μετέχειν ἑκάστων κοινωνεῖ ταύτῃ, τὸ μὲν μᾶλλον, τὸ δ' ἥττον· καὶ διαμένει οὐκ αὐτό, ἀλλ' οἷον αὐτό, ἀριθμῷ μὲν οὐχ ἓν, εἶδε δ' ἓν.*

ever have motion.<sup>242</sup> Accordingly, Aristotle supposes that the eternal motion of nature is, as it were, the one life of all objects naturally connected.<sup>243</sup> Consequently, in all the different modes of natural existence, Aristotle nowhere speaks of any dead or lifeless form: on the contrary, his utmost efforts are directed to reduce all things, as far as possible, to some living and life-giving activities.

This, however, in every case, is impossible; for there are certain elements of being into which no vital energy can permeate. These objects, which present themselves in the course of the most ordinary inquiries, duly influenced the cautious and circumspect mind of Aristotle, who invariably guards against all extreme and exclusive assertions. He, accordingly, assumes, among the grounds of things, a something which opposes itself to the rational end, the active form, or moving force. We have already seen that three of the causes of which Aristotle supposed things to consist, were made identical; these, however, (to employ a modern expression,) do not indicate the sensible, but the supra-sensible, in the objects of sense. But it would be in vain to attempt to identify the fourth with the other three; it is the ground of the sensible, and, in individual things, is the sensible itself, and, so far as it is conceivable apart from form, it is matter. Here,

<sup>242</sup> Met. ix. 8. *μιμείται δὲ τὰ ἀφθαρτα καὶ τὰ ἐν μεταβολῇ ὄντα, ὅλον γῆ καὶ πῦρ· καὶ γὰρ ταῦτα αἰεὶ ἐνεργεῖ. καθ' αὐτὰ γὰρ καὶ ἐν αὐτοῖς ἔχει τὴν κίνησιν.*

<sup>243</sup> Phys. viii. 1. *κίνησις — αἰεὶ ἦν καὶ αἰεὶ ἔσται καὶ τοῦτ' ἀθάνατον καὶ ἀπαυστον ὑπάρχει τοῖς οὖσιν, ὅλον ζωὴ τις οὖσα τοῖς φύσει συνιστᾶσι πᾶσιν.*

therefore, we have Aristotle maintaining a strict contrariety between matter and the other kind of grounds or principles. In the Aristotelian theory this contrariety assumes a similar form to that which it took in the Platonic. It is not, it is true, as already remarked, the evil, but merely that which has a potentiality for opposites, and, therefore, both for good and for evil; and whenever, consequently, evil is found in things, it is a proof that, in them, the good has not attained to its complete actuality, and therefore indicates a limitation of good. In this contrariety, Aristotle, like Plato, speaks of two causes only—the end, and that which is of necessity.<sup>244</sup> Nevertheless, the necessity which Aristotle admitted in sensible objects, is not of such a nature as has been understood by many philosophers, who have explained it to be a moving nature, which forms the universe by the laws of gravity.<sup>245</sup> It is true, that he does at times reduce all moving causes to necessity,<sup>246</sup> but in such cases he does not speak of them in their absolute nature, but as combined with matter.<sup>247</sup> He rigorously distinguishes the several kinds of necessity which may be spoken of. One is outward and violent, as when an object is hindered by some other from following its natural tendency; another is intrinsic, and is in the idea, since nothing can

<sup>244</sup> De Part. An. i. 1. εἰσὶν ἄρα δύο αἰτίαι αὗται, τό θ' οὐ ἔνεκα καὶ τὸ ἐξ ἀνάγκης. Ib. iii. 2, 7. οὐκ ἐξ ἀνάγκης, ἀλλὰ τοῦ εὖ καὶ καλῶς ἔνεκεν.

<sup>245</sup> Phys. ii. 9.

<sup>246</sup> De Gen. An. v. 1. οὔτε δ' ἐπ' ἐνίων πρὸς τὸν λόγον συντείνει τὸν τῆς οὐσίας, ἀλλ' ὡς ἐξ ἀνάγκης γιγνομένων εἰς τὴν ὕλην καὶ τὴν κινήσαν ἀρχὴν ἀνακτῖον τὰς αἰτίας.

<sup>247</sup> Phys. ii. 9. φανερόν δὲ ὅτι τὸ ἀναγκαῖον ἐν τοῖς φυσικοῖς τὸ ὡς ὕλη λεγόμενον καὶ αἱ κινήσεις αἱ ταύτης.

undergo relations inconsistent with itself;<sup>248</sup> a third, is that of matter; and this necessity is conditional, and dependent on the end. For instance, an end being proposed, a means is necessary; for if the end be really to be attained, there must of necessity be something else through which it is to be attained; such is matter.<sup>249</sup> Aristotle, as usual, compares this law of the grounds of being with the forms of thought; the conclusion is the end to be attained by the premises, which, again, are the materials which have their necessity in the supposition that the conclusion must be found.<sup>250</sup> Accordingly, Aristotle follows in the steps of Plato, in regarding matter as the mean, and in making the end to be the prime cause,<sup>251</sup> or, as he otherwise terms it, that which necessarily must be, if aught else is.<sup>252</sup> How greatly the worth of the material cause is depreciated by such a view is palpable; it becomes not an independent, but merely a conditional cause, and cannot have any just claim to the title of first cause. Hence it is that the final causes are called, without any limitation, the causes

<sup>248</sup> Met. v. 5; xi. 8; An. Post. ii. 11.

<sup>249</sup> Phys. ii. 9. ὁμοίως δὲ καὶ ἐν τοῖς ἄλλοις πᾶσιν, ἐν ὅσοις τὸ ἐνὲκά τοῦ ἐστίν, οὐκ ἄνευ μὲν τῶν ἀναγκαῖαν ἐχόντων τὴν φύσιν, οὐ μὲντοι γε διὰ ταῦτα ἄλλ' ἢ ὡς ἕλην, ἀλλ' ἐνὲκά του. — ἐξ ὑποθέσεως δὴ τὸ ἀναγκαῖον, ἀλλ' οὐχ ὡς τέλος· ἐν γὰρ τῇ ἕλῃ τὸ ἀναγκαῖον, τὸ δ' οὐ ἐνὲκα ἐν τῇ λόγῳ. De Part. An. i. 1. πολλὰ γὰρ γίνεται, ὅτι ἀνάγκη. ἴσως δ' ἂν τις ἀπορήσῃ, ποῖαν λέγουσιν ἀνάγκην οἱ λέγοντες ἐξ ἀνάγκης· τῶν μὲν γὰρ δύο τρόπων οὐδέτερον οἷόν τε ὑπάρχειν τῶν διωρισμένων ἐν τοῖς κατὰ φιλοσοφίαν. ἴσθι δ' ἐν γε τοῖς ἔχουσι γένεσιν ἡ τρίτη· λέγομεν γὰρ τὴν τροφήν ἀναγκαῖόν τι κατ' οὐδέτερον τούτων τῶν τρόπων, ἀλλ' ὅτι οὐχ οἷόν τ' ἄνευ ταύτης εἶναι. τοῦτο δ' ἐστὶν ὥσπερ ἐξ ὑποθέσεως.

<sup>250</sup> De Part. An. i. 1; Met. v. 2. καὶ αἱ ὑποθέσεις τοῦ συμπεράσματος ὡς τὸ ἐξ οὗ αἴτια.

<sup>251</sup> De An. ii. 4; cf. Met. v. 5; Phys. ii. 9.

<sup>252</sup> An. Post. ii. 11. τὸ τινῶν ὄντων ἀνάγκη τοῦτ' εἶναι.

of matter itself;<sup>253</sup> for the potential exists only for the sake of energy,<sup>254</sup> and the cause of an essence is not to be sought in the becoming, which only exists for the sake of the essence.<sup>255</sup> In these statements it is easy to perceive an endeavour to make the knowledge of matter possible, since, according to this doctrine, it becomes, in its ground, coincident with the intentional, and therein with the form and motion. Nevertheless, it is of importance to bear in mind, that the necessity by which the end is driven to avail itself of some foreign mean, is left unexplained, and that, consequently, there still remains in material things a something, which, as imperfectly subject to the end, seems to elude cognition.<sup>256</sup>

From these investigations it is clear that, in order to understand rightly the idea which, when he distinguished these four causes, was floating before the mind of Aristotle, it is indispensable to consider them in combination, as he himself usually does. It is evident that his theory of the formation of the world proceeds throughout on the analogy of works of art. Consequently, it is from this source that he draws the instances by which he

<sup>253</sup> Phys. ii. 9. καὶ ἄμφω μὲν τῷ φυσικῷ λεκτέαι αἱ αἰτίαι. μᾶλλον δὲ ἡ τινὸς ἕνεκα· αἴτιον γὰρ τοῦτο τῆς ὕλης, ἀλλ' οὐχ αὕτη τοῦ τέλους.

<sup>254</sup> Met. ix. 8. τίλος δ' ἡ ἐνέργεια καὶ τοῦτον χάριν ἢ δύναμις λαμβάνεται· οὐ γὰρ ἵνα ὄψιν ἔχωσιν, ὁρῶσι τὰ ζῶα, ἀλλ' ὅπως ἁρῶσιν, ὄψιν ἔχουσιν, κ. τ. λ.

<sup>255</sup> De Gen. An. v. 1. ὥσπερ γὰρ ἐλήχθη κατ' ἀρχὰς ἐν τοῖς πρώτοις λόγοις, οὐ διὰ τὸ γίγνεσθαι ἕκαστον ποιόν τι, διὰ τοῦτο ποιόν τί ἐστιν, ὅσα τεταγμένα καὶ ὠρισμένα ἔργα τῆς φύσεώς ἐστιν, ἀλλὰ μᾶλλον διὰ τὸ εἶναι τοιαυτὰ γίγνεται τοιαῦτα· τῇ γὰρ οὐσίᾳ ἡ γένεσις ἀκολουθεῖ καὶ τῆς οὐσίας ἕνεκά ἐστιν, ἀλλ' οὐχ αὕτη τῇ γενέσει.

<sup>256</sup> In the last quoted passage this is manifest from the fact that alongside of the orderly and determinate nature, an indeterminate and orderless is posited.

seeks to illustrate the co-existence of the four causes. Thus he observes that, in order to the production of a statue or a house, art or an artist, as the moving cause, is requisite; and in the next place, an end, i. e. the proposed work; then a form or a thought (λόγος), after which it is to be fashioned; lastly, some material, as brass or stone.<sup>257</sup> In the same manner, these four causes must co-operate in the production of the works of nature. There the seed, or that which potentially is and out of which the living creature is produced, is the matter, the generator is the moving cause, while the general form is the living being which is to arise from the seed, and also indicates the end, on account of which the process of becoming is carried on.<sup>258</sup> In order to carry out this thought, Aristotle refutes the opinion that the world had its origin in chance, or from itself through the action of any blind force of nature. For as accident and chance are only collaterally causes, and attach themselves to that which nature is accomplishing in order to some end, the world, even if it had been formed by chance or hazard, must nevertheless have originated in nature or reason as its first and earliest causes.<sup>259</sup> On this account he attempts to overthrow the objection that natural objects do

<sup>257</sup> Met. iii. 2.

<sup>258</sup> De Part. An. i. 1; Met. viii. 4.

<sup>259</sup> Phys. ii. 6. ἐπεὶ δ' ἐστὶ τὸ αὐτόματον καὶ ἡ τύχη αἰτία, ὣν ἂν ἡ νοῦς γένοιτο αἰτίος ἢ φύσις, ὅταν κατὰ συμβεβηκὸς αἰτιῶν τι γίνηται τούτων αὐτῶν, οὐθὲν δὲ κατὰ συμβεβηκὸς ἐστὶ πρότερον τῶν καθ' αὐτό, ὁρῶν ὅτι οὐδὲ τὸ κατὰ συμβεβηκὸς αἰτίον πρότερον τοῦ καθ' αὐτό. ὕστερον ἄρα τὸ αὐτόματον καὶ ἡ τύχη καὶ νοῦ καὶ φύσεως· ὥστε εἰ ὅτι μαλιστα τοῦ οὐρανοῦ αἰτίων τὸ αὐτόματον, ἀνάγκη πρότερον νοῦν καὶ φύσιν αἰτίαν εἶναι καὶ ἄλλων πολλῶν καὶ τοῦδε τοῦ παντός. Met. xi. 8.

not arise for the sake of any end, since nowhere is the moving nature seen to take counsel to itself,<sup>360</sup> by observing that art even does not do so; where however he was evidently thinking of an art acting by an unconscious impulse. Lastly, he considers that these same grounds supply an ample refutation of that perverted argument, which would draw from the irregular productions of nature, a proof that much is made without any design; for this, he says, is the case also even with art. The artist, although he fashions all for some end, nevertheless often fails in his object, and these monstrosities of nature are to be regarded in the light of similar miscarriages.<sup>361</sup> All these representations of the grounds of nature do not differ materially from those of the Platonic doctrine, and indeed it is apparently quite in accordance with the general character of the Greeks, who were pre-eminent in artistical skill. All that, in this view, is peculiar to Aristotle is merely the manner in which matter and form are closely bound up together, the former being potentially what the latter is actually, and in which he so determines notionally their mutual relations, as to regard the moving cause as a similar force already existing in some other matter, in the same manner as the artist must possess a moving power in matter in order to realise his idea in some

<sup>360</sup> Phys. ii. 8. ἀποπον δὲ το μὴ οἶσθαι ἕνεκά του γίνεσθαι, ἰὰν μὴ ἴδωσι τὸ κινουὺν βουλευσάμενον. καίτοι καὶ ἡ τέχνη οὐ βουλεύεται.

<sup>361</sup> L. I. ἀμαρτία δὲ γίγνεται καὶ ἐν τοῖς κατὰ τέχνην. ἔγραψε γὰρ οὐκ ὀρθῶς ὁ γραμματικὸς καὶ ἐπότισεν οὐκ ὀρθῶς ὁ ἰατρὸς τὸ φάρμακον· ὥστε δῆλον ὅτι ἐνδέχεται καὶ ἐν τοῖς κατὰ φύσιν. εἰ δὲ ἴστιν ἕνια κατὰ τέχνην, ἐν οἷς τὸ ὀρθῶς ἕνεκά του, ἐν δὲ τοῖς ἀμαρτανόμενοις ἕνεκα μὲν τινος ἐπιχειρεῖται, ἀλλ' ἀποτυγχάνεται, ὁμοίως ἀνέχοι καὶ ἐν τοῖς φυσικοῖς, καὶ τὰ τέρατα ἀμαρτήματα ἐκείνου τοῦ ἕνεκά του.

foreign matter, and that thereby placing a formative power in every fashioned form, Aristotle considers the end of the artistic activity in the universe, not as a dead or inert shape, but as a living and life-giving activity.

Hitherto we have been taught to consider the grounds of essence merely as conditional, as forms which, when combined with matter, constitute an essence, as ends agreeable to such essence, and as moving forces in matter: in which supposition it is implied that they have their special existence in virtue of some other ground, which combines its matter with its form. But an ultimatum must be looked for in every species of cause, since science would be impossible if the causes proceeded back in a dependent series to infinity.<sup>262</sup> There must be a primal matter and a primal moving cause.<sup>263</sup> If the determinations of the form and the essence were infinite, a definition of them would be impossible, since every successive term is dependent on the first, and if there be not a first there cannot be any following.<sup>264</sup> If we may not assume an eternal and permanent essence, devoid of all sensible properties, how could order exist in the world? <sup>265</sup> If there were no ultimate end, all good would be overthrown, and there would be no reason in the nature of things, for reason performs nothing with-

<sup>262</sup> Met. ii. 2.

<sup>263</sup> Phys. v. 1. *ἔπει δ' ἐστὶ μὲν τι τὸ κινεῖν πρῶτον, ἔστι δὲ τι τὸ κινούμενον.*

<sup>264</sup> Met. ii. 2. *ἀλλὰ μὴν οὐδὲ τὸ τί ἦν εἶναι ἐνδέχεται ἀνάγεσθαι εἰς ἄλλον ὁρισμὸν πλεονάζοντα τῷ λόγῳ. αἰεὶ γὰρ ἐστὶν ὁ ἔμπροσθεν μᾶλλον, ὃ δ' ὕστερος οὐκ ἔστιν· οὐ δὲ τὸ πρῶτον μὴ ἔστιν, οὐδὲ τὸ ἐχόμενον ἔστιν.*

<sup>265</sup> Met. xi. 2; xii. 10.



out an end and aim, and no one would undertake aught if he could not attain to an end.<sup>266</sup> In like manner it follows that there must be a first moving cause, since otherwise man would be compelled to remount into infinity, constantly seeking a moving cause of the moved, without, however, finding a science of the principle of motion.<sup>267</sup>

The chief ground of the doctrine evidently lies in the view which passed from earlier times through Plato to Aristotle, that a definite and limiting ground of all things must be posited, since the limitless eludes cognition. However, it is no slight difficulty in the system of Aristotle to demonstrate the necessity of a first cause of motion, and, on this account, he is rather prolix on this point, while he briefly assumes the necessity of a last end and first form as an indispensable to science. Although this matter is more directly connected with certain doctrines of his physical system, we must, nevertheless, adduce its principal heads, since it essentially belongs to the universal principles of science. The difficulty arises from his regarding the moving cause both in form and kind as one with the form to be produced, and yet posits it as a cause which is in some distinct matter, from

<sup>266</sup> Met. ii. 2. *ἔτι δὲ τὸ οὐ ἔνεκα τέλος, τοιοῦτον ὃ ἐ μὴ ἄλλου ἔνεκα, ἀλλὰ τᾶλλα ἐκείνου. ὥστ' εἰ μὲν ἔσται τοιοῦτον τὸ ἰσχατον, οὐκ ἔσται ἄπειρον, εἰ δὲ μὴθὲν τοιοῦτον, οὐκ ἔσται τὸ οὐ ἔνεκα. ἀλλ' οἱ τὸ ἄπειρον ποιοῦντες λαμβάνουσιν ἐξαιροῦντες τὴν τοῦ ἀγαθοῦ φύσιν· καίτοι οὐθεὶς ἂν ἐγχειρήσειεν οὐθὲν πράττειν μὴ μέλλων ἐπὶ πέρας ἔχειν. οὐδ' ἂν εἴη νοῦς ἐν τοῖς αὐτοῖς· ἔνεκα γὰρ τινος αἰεὶ πράττει ὅγε νοῦν ἔχων· τοῦτο γὰρ ἔστι πέρας· τὸ γὰρ τέλος πέρας ἐστίν.*

<sup>267</sup> L. i.; Phys. viii. 5. *καὶ ἄνευ μὲν τοῦ πρώτου τὸ τελευταῖον οὐ κινήσει. — ἀδύνατον γὰρ εἰς ἄπειρον ἵνα τὸ κινεῖν καὶ τὸ κινούμενον ὑπ' ἄλλου αὐτό· τῶν γὰρ ἀπείρων οὐκ ἔστιν οὐθὲν πρῶτον.*

which it necessarily follows that it itself must have come into being by the mediation of some other moving cause. And so the series of moving causes must be infinite as time also, wherein motion continues, is infinite.<sup>268</sup> According to this view it is difficult to see how a first cause is to be found. If, however, according to these statements, the series of moving causes must be followed to infinity, it is only perishable and sensible essences that are here intended, those essences which are in production and movement; and man must raise himself above the sphere of the becoming and the perishable, if he would discover the first cause of all. Aristotle attempts to show from the sensible itself, the necessity of admitting such a first cause, and through it raises himself to the idea of an unmoved mover. The ground which he adduces for the assumption of such must now occupy our attention.

If, he argues, in conformity with a common view, we assume that every mover must also be moved, the question immediately presents itself whether it must be moved in the same manner as that which it has moved, or not. Now if the latter case holds true, and that which moves body in space, does itself only change, but not move in space, the latter would ultimately come back to the former. For as the kinds of motion are definite, the moving and being-moved must circulate through these different kinds, and, to pass over the intermediate members and return at once to the earlier cause, the result

<sup>268</sup> Met. xii. 6.

would ultimately be, that the moving would be moved, in the same manner as it had set in motion. Such an assumption however is absurd, for in such a case it would follow, that the teacher would learn in the same manner that he taught, and generally, every thing would be moveable in the same sense as that in which it is capable of moving, and the architect would be a suitable material for building, and the physician for healing in the same way, and of necessity.<sup>269</sup> Now it must be owned that this argument is not complete; nevertheless, we cannot fail to see the result to which it leads, viz. the refutation of all ideas of a mechanical propagation of motion. On this account, Aristotle subjoins the conclusion that there must be a moving something, which neither is moved, nor can be moved by aught else, but is itself the principle of its own motion.

If, however, Aristotle would show the necessity of a first unmoved cause of motion, he must oppose not only the mechanical, but also the dynamical physiology, which pretends to derive all things out of a self-moving force. Against this doctrine he urges several objections. It is, he argues, possible to distinguish that which is moved, that which moves, and that by means of which motion is imparted. Now that, by whose means one thing

<sup>269</sup> Phys. viii. 5. ἔτι δὲ μᾶλλον τούτων ἄλογον, ὅτι συμβαίνει πᾶν τὸ κινητικὸν κινητὸν, εἴπερ ἅπαν ὑπὸ κινουμένου κινεῖται τὸ κινούμενον. ἔσται γὰρ κινητὸν, ὥσπερ εἰ τις λέγοι, ὅτι πᾶν τὸ ὑγιαστικὸν καὶ ὑγιάζον καὶ ὑγιαστὸν ἔσται, καὶ τὸ οἰκοδομητικὸν οἰκοδομητὸν, ἢ εὐθὺς ἢ διὰ πλειόνων. λέγω δ' οἷον εἰ κινητὸν μὲν ὑπ' ἄλλου πᾶν τὸ κινητικόν, ἀλλ' οὐ ταύτην τὴν κίνησιν κινητὸν, ἣν κινεῖ τὸ πλησίον, ἀλλ' ἑτέραν, οἷον τὸ ὑγιαστικὸν μαθητὸν. ἀλλὰ τοῦτο ἱπαναβαῖνον ἥξει ποτὲ εἰς τὸ αὐτὸ εἶδος, ὥσπερ εἴπομεν πρότερον· τὸ μὲν οὖν τούτων ἀδύνατον, τὸ δὲ πλασματῶδες· ἀποπον γὰρ ἐξ ἀνάγκης τὸ ἀλλοιωτικὸν αὐξητὸν εἶναι.

moves another, must itself be moved, either by another, or by itself; and so on continually; ultimately, however, if we would not remount into infinity, we must assume a moving principle, which moves others by means of itself, and is, at the same time, moved, i. e. a self-moving cause.<sup>270</sup> From this it follows that a threefold distinction must be made running parallel with that previously made. The moved must necessarily be moved but not necessarily move; that by means of which aught is moved, must necessarily move, and also necessarily be moved, not however by another, but by itself; and, lastly, so far as it is different from that through which it moves, must move, but at the same time be moved by itself. As now, says Aristotle, the first two species of being are found to exist, it is at least probable, not to say necessary, that the third must also be.<sup>271</sup> His more stringent proof of such a third species is grounded on a distinction which he draws between the several parts of the self-moving. These are necessarily two; the

<sup>270</sup> L. l. *πᾶν γὰρ τὸ κινεῖν τί τε κινεῖ καὶ τινί· ἡ γὰρ αὐτῷ κινεῖ τὸ κινεῖν ἢ ἄλλῳ. — ἀδύνατον δὲ κινεῖν ἀνευ τοῦ αὐτὸ αὐτῷ κινεῖντος τὸ ὅτι κινεῖ. ἀλλ' εἰ μὲν αὐτὸ αὐτῷ κινεῖ, οὐκ ἀνάγκη ἄλλο εἶναι, ὅτι κινεῖ, ἀν δὲ ὅ ἕτερον τὸ ὅτι κινεῖ, ἔστι τι, ὃ κινήσει οὐ τινί, ἀλλ' αὐτῷ. ἡ εἰς ἀπειρον εἰσιν. — εἰ οὖν κινεῖται μὲν τοῦτο, μὴ ἄλλο δὲ τὸ κινεῖν αὐτό, ἀνάγκη αὐτὸ αὐτὸ κινεῖν. — τὸ δ' ὅτι κινεῖ καὶ κινεῖν καὶ κινεῖσθαι (sc. ἀνάγκη). συμμεταβάλλει γὰρ τοῦτο ἅμα καὶ κατὰ τὸ αὐτὸ τῷ κινουμένῳ ὄν. The general reason has been already examined; viz., the *δυνάμει κινήτικόν* becomes *ἐνεργεῖα* κινεῖν. Aristotle here adduces, besides, some more special reasons.*

<sup>271</sup> L. l. *τρία γὰρ ἀνάγκη εἶναι, τὸ τε κινούμενον καὶ τὸ κινεῖν καὶ τὸ ὅτι κινεῖ· τὸ μὲν οὖν κινούμενον ἀνάγκη μὲν κινεῖσθαι, κινεῖν δὲ οὐκ ἀνάγκη· τὸ δὲ ὅτι κινεῖ καὶ κινεῖν καὶ κινεῖσθαι. — τὸ δὲ κινεῖν οὕτως, ὥστε εἶναι μὴ ὅτι κινεῖ ἀκίνητον. ἐπεὶ δὲ ὁρῶμεν τὸ ἴσχατον, ὃ κινεῖσθαι μὲν δύναται, κινήσεως δὲ ἀρχὴν οὐκ ἔχει, καὶ ὃ κινεῖται μὲν, οὐχ ὑπ' ἄλλου δέ, ἀλλ' ὑπ' αὐτοῦ, εὐλογον, ἵνα μὴ ἀναγκαῖον εἴπωμεν, καὶ τὸ τρίτον εἶναι, ὃ κινεῖ ἀκίνητον ὄν. Cf. de Gen. et Corr. i. 7.*

moving and the moved, and it is vain to object that these parts alternately move one another, for, in such a case, there would be no first mover.<sup>272</sup> Moreover it is impossible that aught can move itself in all its parts, for then it would, in the same sense, both move and be moved, teach and learn.<sup>273</sup> On the contrary, in the self-moving, we must necessarily distinguish between that which is posited *in posse*, the moveable, and that which is posited *in actu*, the energy, through which the actuality of motion is first realised. If then, these two parts are distinct, one must be moved, and the other move,<sup>274</sup> which, by a natural consequence of the contrariety, must be regarded as unmoved.

From this proof, it is clear that Aristotle maintained a close connection between the notion of the first mover, and that of the self-moving living essence. The first mover is even that which, in living creatures, produces motion, and may be regarded as a part of the living creature. Still it is not quite clear from all this, that the first ground of motion must be regarded as an independent self-subsisting essence. This however followed to Aristotle's mind, from the position that the substance is the category which lies as the basis of all the other categories. If all is not to perish, there must be

<sup>272</sup> L. 1. ὅτι δ' οὐκ ἔστι τὸ αὐτὸ αὐτὸ κινεῖν οὕτως, ὥστε ἐκάτερον ὑφ' ἐκείρου κινεῖσθαι, ἐκ τῶνδε φανερόν· οὔτε γὰρ ἔσται πρῶτον κινεῖν οὐθέν, εἴγε ἐκάτερον κινήσει ἐκάτερον.

<sup>273</sup> L. 1. ἀδύνατον δὴ τὸ αὐτὸ αὐτὸ κινεῖν πάντα κινεῖν αὐτὸ αὐτό· φέροιτο γὰρ ἂν ὅλον καὶ φέροι τὴν αὐτὴν φορὰν, ἔν δὲ καὶ ἄτομον τῷ εἶδει. καὶ ἀλλοιοῖτο καὶ ἀλλοιωῖ, ὥστε διδάσκει ἂν καὶ διδάσκειτο ἅμα καὶ ὑγιάζει καὶ ὑγιάζοιτο τὴν αὐτὴν ὑγίαν.

<sup>274</sup> L. 1. τὸ μὲν ἄρα κινεῖ, τὸ δὲ κινεῖται τοῦ αὐτοῦ αὐτοῦ κινεῖντος.

an imperishable substance, which is the ground of all that is imperishable; but motion and time are imperishable; and so there must be an imperishable substance.<sup>275</sup> Imperishable motion therefore necessarily implies an imperishable substance. Aristotle also shows that the explanation of phenomena would be impossible unless some substance were the ground of them, which not merely incidentally, produced motion; but there must be a necessary mover, i. e. one which not merely has the power to move, but one whose essence consists in the actual activity of motion; for otherwise it might once happen that it did not move, and then motion would not be eternal. It does, in truth, appear as if all that has an energy is also potential, but not that every potential has likewise an energy; so that one might admit that the potential is prior to the actual, only from this it would follow that nothing exists, for that which is merely potential can also not be. It is, therefore, requisite to limit the proposition that the potential is prior to the actual, by admitting that it only holds of things which have a potentiality for opposites; but, on the other hand, that the eternal mover always is actually, and that, as it always produces the same effect, either simply so, or in the same period in succession, it ever remains working in the same manner, and is consequently unmoved.<sup>276</sup>

<sup>275</sup> Met. xii. 6. *ἔπει δὲ ἦσαν τρεῖς οὐσίαι, δύο μὲν αἱ φυσικαί, μία δὲ ἡ ἀκίνητος, περὶ ταύτης λεκτέον, ὅτι ἀνάγκη εἶναι τινα αἰδίον οὐσίαν ἀκίνητον. αἱ τε γὰρ οὐσίαι πρῶται τῶν ὄντων, καὶ εἰ πᾶσαι φθαρταί, πάντα φθαρτά. ἀλλ' ἀδύνατον κίνησιν ἢ γενέσθαι ἢ φθαρῆναι· αἱ γὰρ ἦν. οὐδὲ χρόνον κ. τ. λ.*

<sup>276</sup> Phys. viii. 5; Met. I. 1. *ἀλλὰ μὴν εἰ ἔσται κινητικὸν ἢ ποιητικόν, μὴ ἐνεργοῦν δὲ τι, οὐκ ἔστι κίνησις. ἐνδέχεται γὰρ τὸ δύναμιν ἔχον μὴ ἐνερ-*

Moreover, Aristotle maintains that there is only *one* moving cause, although it manifests itself in many moving things. In support of this he adduces, in his usual manner, a variety of reasons, which are of different value in a scientific point of view. Among others he alleges the verse of Homer :<sup>277</sup>

*οὐχ ἄγαθον πολυκοιρανίη, εἰς κοίρανος ἐστω.*

Setting out from the principle that, for the explanation of natural phenomena, it is better to derive them from a limited and small number of causes, whenever possible, than from a greater and indefinite number, he observes that a single eternal and unmoved cause of motion is sufficient, to account for all mundane phenomena.<sup>278</sup> He enters more deeply into the spirit of his theory, when he derives from the eternity of motion the unity of its cause. For what is permanent is one, and the one motion can only have originated from a single cause. Even if it be necessary to ascribe the origin of a particular motion to several moving

γίγν. — εἰ γὰρ μὴ ἐνεργήσει, οὐκ ἔσται κίνησις. ἔτι οὐδ' εἰ ἐνεργήσῃ, ἢ δ' οὐσία αὐτῆς δύναμις· οὐ γὰρ ἔσται κίνησις αἰδίου. ἐνδέχεται γὰρ τὸ δυνάμει ὃν μὴ εἶναι. δεῖ ἄρα εἶναι ἀρχὴν τοιαύτην, ἥς ἡ οὐσία ἐνέργεια. — καίτοι ἀπορία. δοκεῖ γὰρ τὸ μὲν ἐνεργοῦν πᾶν δύνασθαι, τὸ δὲ δυνάμενον οὐ πᾶν ἐνεργεῖν, ὥστε πρότερον εἶναι τὴν δύναμιν. ἀλλὰ μὴν εἰ τοῦτο, οὐθὲν ἔσται τῶν ὄντων· ἐνδέχεται γὰρ δύνασθαι μὴ εἶναι, μήπω δ' εἶναι. — ὥστε οὐκ ἦν ἀπειρον χρόνον χάος ἢ νύξ, ἀλλὰ τὰ αὐτὰ ἀεὶ ἢ περιόδῳ ἢ ἄλλως, εἴπερ πρότερον ἐνέργεια δυνάμεως.

<sup>277</sup> Met. xii. 10.

<sup>278</sup> Phys. viii. 6. εἴπερ οὖν αἰδίου ἡ κίνησις, αἰδίου καὶ τὸ κινουῦν ἔσται πρῶτον, εἰ ἓν· εἰ δὲ πλείω, πλείω τὰ αἰδία. ἓν δὲ μᾶλλον ἢ πολλὰ καὶ πεπερασμένα ἢ ἀπειρα δεῖ νομίζειν· τῶν αὐτῶν γὰρ συμβαινόντων ἀεὶ τὰ πεπερασμένα μᾶλλον ληπτέον· ἐν γὰρ τοῖς φύσει δεῖ τὸ πεπερασμένον καὶ τὸ βέλτιον, ἐὰν ἐνδέχεται, ὑπάρχειν μᾶλλον. ἱκανὸν δὲ καὶ εἰ ἓν, ὃ πρῶτον τῶν ἀκινήτων αἰδίου ὃν ἔσται τοῖς ἄλλοις ἀρχὴ κινήσεως.

III.

M

causes, there must still be one moving cause which comprises all others, and affords to them the ground of their movement.<sup>279</sup> But while this argument is dependent on physical considerations, another rests solely on his general theory of the principles of being. The eternal mover, as being in perfect activity, and bearing nothing in itself which is merely potential, is, according to its very notion, entirely devoid of matter.<sup>280</sup> But, now, matter alone is the ground of multiplicity, and individual substances only differ from one another in that they exhibit the same form or species in different kinds of matter; consequently, the eternal mover, as in nowise participating in matter, cannot dissolve itself into any multiplicity of individual beings. There must, therefore, be a single world and a single moving principle.<sup>281</sup>

From the very nature of this reasoning, it could not express completely the reasons which lead Ari-

<sup>279</sup> L. 1. δῆλον τοίνυν ὅτι, εἰ καὶ μυριάκις εἶναι ἀρχαὶ τῶν ἀκινήτων μὲν, κινουσῶν δέ, καὶ πολλὰ τῶν αὐτὰ ἑαυτὰ κινούντων φθείρεται, τὰ δ' ἐπιγίνε-  
ται, καὶ τόδε μὲν ἀκίνητον ὄν τόδε κινεῖ, ἕτερον δὲ τοδί, ἀλλ' οὐθὲν ἦττον  
ἔστι τι, ὃ περιέχει, καὶ τοῦτο παρ' ἑκαστον, ὃ ἔστι αἰτίον τοῦ τὰ μὲν εἶναι,  
τὰ δὲ μὴ καὶ τῆς συνεχοῦς μεταβολῆς, καὶ τοῦτο μὲν τούτοις, ταῦτα δὲ τοῖς  
ἄλλοις αἰτία κινήσεως. — φανερόν δὲ καὶ ἐκ τοῦδε, ὅτι ἀνάγκη εἶναί τι ἔν  
καὶ αἰδίων τὸ πρῶτον κινεῖν. δέδεικται γὰρ ὅτι ἀνάγκη αἰεὶ κίνησιν εἶναι·  
εἰ δὲ αἰεὶ, ἀνάγκη καὶ συνεκῇ εἶναι, καὶ γὰρ τὸ αἰεὶ ὄν συνεχές. τὸ δ' ἐφεξῆς  
οὐ συνεχές. ἀλλὰ μήν, εἰ γε συνεχές, μία· μία δ', εἰ ὅφ' ἐνός τε κινούντος  
καὶ ἐνός τοῦ κινουμένου. εἰ γὰρ τι ἄλλο καὶ ἄλλο κινήσει, οὐ συνεκῆς ἡ ὅλη  
κίνησις, ἀλλ' ἐφεξῆς.

<sup>280</sup> Met. xii. 6. ἔτι τοίνυν ταύτας δεῖ τὰς οὐσίας εἶναι ἄνευ ὕλης. αἰδίου  
γὰρ δεῖ, εἰ πέρ γε καὶ ἄλλο αἰδίων· ἐνεργείᾳ ἄρα.

<sup>281</sup> Met. xii. 8. ὅτι δὲ εἰς οὐρανὸς φανερόν. εἰ γὰρ πλείους οὐρανοὶ ὥσπερ  
ἀνθρωποι, ἔσται εἶδει μία ἢ περὶ ἑκαστον ἀρχή, ἀριθμῷ δὲ γε πολλαί. ἀλλ'  
ὅσα ἀριθμῷ πολλά, ὕλην ἔχει· εἰς γὰρ λόγος καὶ ὁ αὐτὸς πολλῶν, ὅλον ἀν-  
θρώπου, Σωκράτης δὲ εἰς. τὸ δὲ τί ἦν εἶναι οὐκ ἔχει ὕλην τὸ πρῶτον· ἐν-  
τελίχεια γάρ· ἔν ἄρα καὶ λόγῳ καὶ ἀριθμῷ τὸ πρῶτον κινεῖν, ἀκίνητον ὄν.



stotle to the assumption of an unmoved mover of the world. To ascertain these clearly, we must take a general review of his whole system. As matter and form, which are opposites, are nevertheless combined together in all sensible objects, the hypothesis of a first cause, by which they may be united together, was requisite. This, however, could not be established by the principle by which Aristotle proved the necessary eternity of motion ; that, viz. every combination of form with matter presupposes a moving cause, which must necessarily be a form in matter ;—*a form*, in order that it may exercise a realising activity ; *in matter*, in order that it may work on matter. For the last ground of motion and becoming must be considered to be in itself immutable, and, consequently, a pure form. Now Aristotle looked upon every *form in matter* merely as a second cause or mean ; it is that *through* which motion is effected, not that which moves ; and although the series of second causes be infinite, we shall, nevertheless, upon investigation, arrive at an ultimate term, which is the true moving cause, and which, as such, avails itself of material causes as the means of its operation. In this manner, then, the third of Aristotle's immaterial causes becomes identical with the first two ; it is not only one and the same with form and the end, according to species and form, but also its difference, according to number and matter, becomes evanescent, since it has neither matter nor difference of number. In this way did Aristotle advance to the idea of a unity of science and its object, as far as was possible with his theory of matter. In

fact, the only end of his theory of the three immaterial causes is, to show that all science which raises itself above the sensible has but one single object, which, however, in its various relations to material things, is variously apprehended.

This becomes still clearer upon further examination of the Aristotelian notion of the first mover. In the first place, it is to be observed that on this point Aristotle agrees with Plato in teaching that the last ground of all sensible phenomena must be conceived as perfectly non-sensible; it is free and separate from all matter and all that is sensible;<sup>282</sup> totally removed from all becoming, it cannot suffer any constraint, but is somewhat necessary, in its simple and immutable essence, as something which cannot be otherwise than as it is;<sup>283</sup> immutable and ever-existing, it is not in time, for it cannot be compassed or measured by it, or suffer aught in it.<sup>284</sup> So, too, it is not in space; for spacially extended magnitude is incompatible with it, since it is without parts, and indivisible. For if it had extended magnitude, it must be either infinite or finite; but it cannot be infinite, because there is no infinite extended magnitude, and generally nothing infinite according to actuality; on the other hand, it cannot have a finite magnitude, since it moves through infinite time, and the finite can-

<sup>282</sup> Met. xi. 2. οὐσία χωριστὴ παρὰ τὰς αἰσθητὰς οὐσίας καὶ τὰς δειρο. — χωριστὸν καθ' αὐτὸ καὶ μηδενὶ τῶν αἰσθητῶν ὑπάρχον. Ib. c. 7; xii. 7. κειχωρισμένη τῶν αἰσθητῶν.

<sup>283</sup> Ib. v. 5; xii. 7.

<sup>284</sup> Phys. iv. 12. τὰ αἰὲν ὄντα ὡς αἰὲν ὄντα οὐκ ἔστιν ἐν χρόνῳ· οὐ γὰρ περιμέτρεται ὑπὸ τοῦ χρόνου, οὐδὲ μετρεῖται τὸ εἶναι αὐτῶν ὑπὸ τοῦ χρόνου. σημεῖον δὲ τούτου, ὅτι οὐδὲ πάσχει οὐδὲν ὑπὸ τοῦ χρόνου, ὡς οὐκ ὄντα ἐν τῷ χρόνῳ.

not possess infinite force.<sup>285</sup> These negative determinations of the idea of the first mover, are combined with others of a more positive character. If it is not sensible, it must be conceivable by the understanding. But that which is conceivable by the understanding only, is one and the same with the understanding, or reason, or mind, or whatever else the highest and most perfect knowing power may be called. For that which can apprehend the essence and the intelligible, is reason, which, when it apprehends them, is energy; and, consequently, that which the reason appears to possess of the divine, consists more in reason itself than in any object of thought.<sup>286</sup> Thus, then, we have a perfect identification, in the first mover, of the object of science with the scientific cognition. This result, however, is differently expressed by Aristotle and by Plato; for, with the former, God is not as with the latter, the supreme unity, which is superior to, and comprises both essence and reason, but he is reason itself; which, however, is at the same time the essence,—that which is simply conceivable by the intellect, and which is not a compound of form and matter, but is simple, and only exists in energy.<sup>287</sup> On this account, it is called

<sup>285</sup> Met. xii. 7. διδύκεται δὲ καὶ ὅτι μέγεθος οὐθὲν ἔχειν ἐνδέχεται ταύτην τὴν οὐσίαν, ἀλλὰ ἀμερῆς καὶ ἀδιαίρετός ἐστι. κινεῖ γὰρ τὸν ἄπειρον χρόνον. οὐδὲν δ' ἔχει δύναμιν ἄπειρον πεπερασμένον, κ. τ. λ. Phys. viii. 10.

<sup>286</sup> Met. xii. 7. ταῦτόν νοῦς καὶ νοητόν· τὸ γὰρ δεκτικὸν τοῦ νοητοῦ καὶ τῆς οὐσίας νοῦς· ἐνεργεῖ δὲ ἔχων. ὥστε ἐκεῖνο μᾶλλον τούτου δὲ δοκεῖ ὁ νοῦς θεῖον ἔχειν. The difficult relation of the *ἐκεῖνο* and the *τούτο* must, in my opinion, be understood as explained in the text.

<sup>287</sup> L. l. νοητὴ δὲ ἡ ἐτέρα συστοιχία καθ' αὐτήν· καὶ ταύτης ἡ οὐσία πρώτη καὶ ταύτης ἡ ἀπλὴ καὶ κατ' ἐνέργειαν. Aristotle assumes two *συστοιχίαι*, of one of which the grounds are privative.

simply, that which is expressed in the notion—the essence of things, and also the best,<sup>288</sup> the end of all things; <sup>289</sup> in short, it combines within itself whatever can be an object of science; and, in it, the knowing and the known are one. Consequently, there is in it all the fulness of entity; and, because it is the end of all things, it properly possesses felicity; it is perfect and happy, not by the accession of external good, but by its intrinsic nature.<sup>290</sup> It possesses always, and for ever, the perfect pleasure of rational thought, which man enjoys only at times, and also in a higher degree of perfection than man does.<sup>291</sup> Its activity within itself is eminently its life, which is eternal, and proceeding for ever; it consists in nought else than in pure immortality.<sup>292</sup>

But the most important point in this doctrine to Aristotle, was the scientific results which flow from a knowledge of the supreme cause. For the conception of God as the scientific, contemplative reason, necessarily brought him to the consideration of the difficulties which are involved in the explanation of true thought as fully exhaustive of its object. The reason, apparently, is not supreme, for

<sup>288</sup> Met. xii. 8.

<sup>289</sup> Ib. c. 7. *καὶ ἔστιν ἄριστον αἰὲς ἢ ἀνάλογον τὸ πρῶτον.*

<sup>290</sup> Pol. vii. 1.

<sup>291</sup> Met. l. 1. *διαγωγὴ δ' ἐστὶν οἷα ἡ ἀρίστη μικρὸν χρόνον ἡμῖν· οὕτω γὰρ αἰὲς ἐκείνῳ ἐστίν, ἡμῖν μὲν γὰρ ἀδύνατον. ἐπεὶ καὶ ἡ ἡδονὴ ἐνέργεια τούτου· καὶ διὰ τοῦτο ἐγγήγορσις, αἰσθησις, νόησις ἡδιστον, ἐλπίδες δὲ καὶ μνημαὶ διὰ ταῦτα. ἡ δὲ νόησις ἡ καθ' αὐτήν τοῦ καθ' αὐτὸ ἀρίστου καὶ ἡ μάλιστα τοῦ μάλιστα. — εἰ οὖν οὕτως εὖ ἔχει ὡς ἡμεῖς ποτὲ ὁ θεὸς αἰὲς, θαυμαστόν· εἰ δὲ μᾶλλον ἔτι θαυμασιώτερον.*

<sup>292</sup> L. 1. *ἐνέργεια δὲ ἡ καθ' αὐτήν ἐκείνου ζωὴ ἀρίστη καὶ αἰδῖος, φανέν δὲ τὸν θεὸν εἶναι ζῶον αἰδῖον ἄριστον. ὥστε ζωὴ καὶ αἰὼν συνεχῆς καὶ αἰδῖος ὑπάρχει τῷ θεῷ· τοῦτο γὰρ ὁ θεός. De Cælo, ii. 3. θεοῦ δὲ ἐνέργεια ἀθανασία, τοῦτο δ' ἐστὶ ζωὴ αἰδῖος.*

there is a higher ruler above it—that which is conceivable by the reason, which, by contact with the reason, first produces an actual intelligence.<sup>293</sup> But this only holds of that reason which comes into energy from out of the potential, whereas the divine reason neither thinks nor changes, for any change must be a motion, and a change for the worse.<sup>294</sup> The divine reason, therefore, is an actual apprehension, an unceasing intelligence, which, as it needs not to be evoked out of potentiality into actuality, can occasion no weariness. Moreover, the object of its intelligence is nothing extrinsecal, upon which, in that case, it would be dependent, but its proper object is itself. With God, thought is not, as elsewhere, a thought of other, and only incidentally of itself; but with God, as with theoretical science, the notion or the thought is also the thing or the object. Hence the famous apophthegm of Aristotle, “The thought of God is the thought of thought.”<sup>295</sup> Here, consequently, the object and the thought are one; and, even in the world, it must be observed, the cognition of the

<sup>293</sup> Met. xii. 9. εἴτε νοεῖ, τούτου δ' ἄλλο κύριον (οὐ γάρ ἐστι τοῦτο, ὅστις αὐτοῦ ἡ οὐσία, νόησις, ἀλλὰ δύναμις), οὐκ ἂν ἡ ἀρίστη οὐσία εἴη. — ἔπειτα δὴλον ὅτι ἄλλο τι ἂν εἴη τὸ τιμιώτερον ἢ ὁ νοῦς, τὸ νοούμενον.

<sup>294</sup> L. 1. δὴλον τοίνυν ὅτι τὸ θεώτατον καὶ τιμιώτατον νοεῖ καὶ οὐ μεταβάλλει· εἰς χεῖρον γὰρ ἢ μεταβολή, καὶ κίνησις τις ἦδη τὸ τοιοῦτον.

<sup>295</sup> L. 1. καὶ γὰρ τὸ νοεῖν καὶ ἡ νόησις ὑπάρξει καὶ τὸ χεῖριστον νοοῦντι. ὥστε εἰ φευκτὸν τοῦτο (καὶ γὰρ μὴ ὁρᾶν ἔνια κρεῖττον ἢ ὁρᾶν), οὐκ ἂν εἴη τὸ ἀριστον νόησις. αὐτὸν ἄρα νοεῖ, εἴπερ ἐστὶ τὸ κράτιστον, καὶ ἔστιν ἡ νόησις τῆς νοήσεως νόησις. φαίνεται δ' αἰεὶ ἄλλου ἢ ἐπιστήμη καὶ ἡ αἰσθησις καὶ ἡ δόξα καὶ ἡ διάνοια, αὐτῆς δ' ἐν παρέργῳ. — ἢ ἐπ' ἐνίων ἢ ἐπιστήμη τὸ πρᾶγμα; ἐπὶ μὲν τῶν ποιητικῶν ἀνευ ὕλης ἡ οὐσία καὶ τὸ τί ἦν εἶναι, ἐπὶ δὲ τῶν θεωρητικῶν ὁ λόγος τὸ πρᾶγμα καὶ ἡ νόησις. Ib. c. 7; cf. Magn. Mor. ii. 15, where plausible objections against God's self-contemplation are brought forward.

rational is at once the object of science and the activity of the Deity within us.<sup>296</sup> For Aristotle is wont, in the olden manner, to imply, and, without thinking it necessary to prove, merely hints, the opinion that reason is in man, exactly in the same manner as in God, since all moving things must necessarily possess the first mover;<sup>297</sup> and, in the same spirit, he adopts, without hesitation, the saying of Heraclitus, that the divine is to be found everywhere, even in objects apparently the most unlikely.<sup>298</sup>

When, by the nature of the subject, we are led to a comparison of Aristotle and Plato, we cannot fail at once to notice an essential difference between the modes in which they respectively apprehended the idea of God. The Platonic doctrine of God, and his relation to the universe, is much more mythical than the Aristotelian. The former expresses a firm and decided conviction that God, in his perfect unity, far transcends all conception;—he is above truth and essence, above reason and science; consequently, whenever Plato attempts to advance any other affirmative proposition concerning God, than that he is absolute good, we have only to look for figurative expressions; with him it is sufficient to be cognisant of God in the multiplicity of ideas. On the other hand, Aristotle is totally averse to figurative language. He must have

<sup>296</sup> De An. iii. 4. ἐπὶ μὲν τοῖς ἀνεν ὅλης τὸ αὐτὸ ἐστὶ τὸ νοῦν καὶ τὸ νοούμενον· ἡ γὰρ ἐπιστήμη ἡ θεωρητικὴ καὶ τὸ οὕτως ἐπιστητὸν τὸ αὐτὸ ἐστὶ. Ib. c. 7. τὸ αὐτὸ ἐστὶ ἡ κατ' ἐνέργειαν ἐπιστήμη τῷ πράγματι.

<sup>297</sup> Phys. vii. 2; viii. 5. ἀνάγκη ἄρα τὸ αὐτὸ ἐαυτὸ κινεῖν εἶχεν καὶ τὸ κινεῖν, ἀκίνητὸν δέ.

<sup>298</sup> De Part. An. i. 5.

everything laid down in a strict doctrinal expression, and, accordingly, he calls God, reason. But even this positive term soon appears to be unsatisfactory, and Aristotle is forced to determine it more closely by some negative limitations. Since every ultimate end is perfected in God, no action or operation can be assigned to him. Virtue is merely human, not divine; on the contrary, the divine is to be looked upon as higher than, and as transcending all virtue; <sup>299</sup> to ascribe to the Deity any species of merely moral act, would be to form a very unworthy notion of him; his felicity, his energy, since he cannot sleep, like Endymion, is not an act, but a cognition; he is not practical, but theoretical reason.<sup>300</sup> The examination of the grounds on which Aristotle denied to God a practical reason, suggests the remark that it would be

<sup>299</sup> Eth. Nic. vii. 1; Magn. Mor. ii. 5. οὐκ ἔστι θεοῦ ἀρετή· ὁ γὰρ θεὸς βελτίων τῆς ἀρετῆς καὶ οὐ κατ' ἀρετὴν ἔστι σπουδαῖος.

<sup>300</sup> Eth. Nic. x. 8. ἡ γὰρ τέλεια εὐδαιμονία ὅτι θεωρητικὴ τίς ἐστιν ἐνέργεια, καὶ ἐντεῦθεν ἂν φανείη. τοὺς θεοὺς γὰρ μάλιστα ὑπειλήφμεν μακαρίους καὶ εὐδαιμόνας εἶναι· πράξεις δὲ ποίας ἀπονεύμαι χρεῶν αὐτοῖς; πύτερα τὰς δικαίας; ἢ γελοῖοι φανοῦνται συναλλάττοντες καὶ παρακαταθήκας ἀποδιδόντες καὶ ὅσα ἄλλα τοιαῦτα; ἀλλὰ τὰς ἀνδρείους; ὑπομένοντας τὰ φοβερά καὶ κινδυνεύοντας, ὅτι καλόν. ἡ τὰς ἐλευθερίους; τίνοι δι δώσουσιν; ἀτοπον δ' εἰ καὶ ἔσται αὐτοῖς νόμισμα ἢ τι τοιοῦτον. αἱ δὲ σώφρονες τί ἂν εἰεν; ἡ φορτικὸς ὁ ἔπαινος, ὅτι οὐκ ἔχουσι φαύλας ἐπιθυμίας; διεξιούσι δὲ πάντα φαίνοιτ' ἂν τὰ περὶ τὰς πράξεις μικρὰ καὶ ἀνάξια θεῶν. ἀλλὰ μὴν ζῆν τε πάντες ὑπειλήφασιν αὐτούς· καὶ ἐνεργεῖν ἄρα· οὐ γὰρ δὴ καθεύδειν, ὥσπερ τὸν Ἐνδυμῖωνα· τῷ δὲ ζῶντι τοῦ πράττειν ἀφρημένῳ, ἐτι δὲ μᾶλλον τοῦ ποιεῖν, τί λείπεται πλὴν θεωρίας; ὥστε ἡ τοῦ θεοῦ ἐνέργεια μακαριότητι διαφέρουσα θεωρητικὴ ἂν εἴη. De Cælo, ii. 12. In other passages both πράξεις and ἔργα are ascribed to God, Pol. vi. 3, 4, and even a ποιεῖν, de Cælo, i. 4; and the εὐδαιμονία is a πράξις or εὐπραγία, Pol. vii. 3, and elsewhere; moreover, ἐνεργεῖα is often made equivalent with πράξις. But, in all these determinations, we can see nothing more than the reaction of certain objections, which enforce their due consideration against a one-sided theory, and especially when it attempts to lay down, according to its own views, the nature of God's action in the world.

easy to adduce similar reasons against his theoretical reason. For his reasoning amounts to nothing more than an enumeration of the incongruities which result from a conception of the similarity of God's intellectual life and that of man. It, however, evinces how great was Aristotle's bias in favour of the speculative, and against the practical reason. A predilection for scientific pursuits seduced Aristotle, like many others. At the same time, it proves that, when Aristotle sought to fix the idea of God in its unity, and to determine its proper sense in a positive and self-evident expression, he attempted a problem which far transcended his powers of solution. .

We arrive at a similar result from the consideration of his attempts to ascertain clearly, and to fix the true relation of God to the sensible world. The conception of God as the mover of the world, involves many difficulties; and it is evident, from his determinations concerning the activity of God, that Aristotle endeavours to get rid of, if not to overcome these difficulties. It is manifest that Aristotle, even while he attributes all perfection to the first cause, endeavours to bring it in closer connection with phenomena, than Plato was able to do. This he was able to accomplish by considering the eternal energy as an activity in complete actuality; for, by this means, he got rid of the contrariety which Plato had posited between the sum of all ideas, on one hand, and motion and becoming on the other. The importance of this result, in the judgment of Aristotle, is strongly shown by the care which he takes to warn his disciples



against supposing the unmoved moving cause to be at rest; for rest, he observes, is only an accident of that which can pass from opposite into opposite, i. e. from motion into rest.<sup>301</sup> But, although the notion of energy might appear fitted to establish, in a certain degree, the truth of life in its highest acceptation, and to reconcile the contrariety of essence and life, nevertheless it was inadequate to account for the manner in which the activity of God, notwithstanding that it ever remains the same with itself, still produces motion in the world, constantly, and in different senses, bringing about both production and corruption. Aristotle, accordingly, found himself reduced to the necessity of drawing a distinction between the energy of God in itself, and his energy in his relation to other.<sup>302</sup> The absolute energy of God is his self-contemplating reason, of which the regular motion of the heavenly sphere may be regarded as the outward expression.<sup>303</sup> But the most suitable expression to indicate the divine energy in relation to other, must be drawn from the manner in which Aristotle connects the movement of the world by God with the notion of the end or final cause. God, as perfectly good and beautiful, is the object of desire, and, in reference to knowing, he is the knowable; for, in the first ground, these two are one. But the object of desire sets in movement the

<sup>301</sup> Phys. iii. 2; iv. 12; v. 2.

<sup>302</sup> Met. xii. 6. *εἰ δὲ τὸ αὐτὸ αἰεὶ περιώδῃ, δεῖ τι αἰεὶ μένειν ὡσαύτως ἐνεργοῦν. εἰ δὲ μέλλει γίνεσθαι καὶ φθορὰ εἶναι, ἄλλο δεῖ εἶναι αἰεὶ ἐνεργοῦν ἄλλως καὶ ἄλλως. ἀνάγκη ἄρα ὥδι μὲν καθ' αὐτὸ ἐνεργεῖν, ὥδι δὲ κατ' ἄλλο.* κ. τ. λ. Cf. ib. xi. 2.

<sup>303</sup> L. 1.; ib. c. 7.

desire, and the knowable the reason, without, however, being moved themselves; and then desire and reason set all else in motion, and thus the motion of the world and of nature depends upon an unmoved cause.<sup>304</sup> In this idea we recognise one of those true and beautiful thoughts, which Aristotle inherited from Plato; but it is his especial merit, to have given to it a precise and definite form, and to have interwoven it with his whole theory.

This doctrine apparently removes the difficulties which lie in the notion of an unmoved mover, as it is commonly understood. That which moves, must necessarily stand in a certain relation of action and passion to the moved. But action and passion are reciprocal, for the moving touches the moved, and is also touched by it. These general principles, Aristotle saw, must be limited; they only apply in those cases where the moving has a potentiality to be moved, and to be passive. He accordingly advances the seemingly paradoxical position, that the unmoved moved may touch the moved object without being touched by it: thus we say, that he who afflicts us, touches us, but not that we are touched by him.<sup>305</sup> Nevertheless, there still remains a difficulty to be disposed of; for Aristotle denies to the

<sup>304</sup> Ib. c. 7. *κινεῖ δὲ ὧδε· τὸ ὁρεκτὸν καὶ τὸ νοητὸν κινεῖ οὐ κινούμενα· τούτων τὰ πρῶτα τὰ αὐτά. ἐπιθυμητὸν γὰρ τὸ φαινόμενον καλόν, βουλευτὸν δὲ πρῶτον τὸ δὴ καλόν. ὁρεγόμεθα δὲ διότι δοκεῖ μᾶλλον ἢ δοκεῖ διότι ὁρεγόμεθα. ἀρχὴ δὲ ἡ νόσις· νοῦς δὲ ὑπὸ τοῦ νοητοῦ κινεῖται. — κινεῖ δὲ ὡς ἐρώμενον, κινούμενον δὲ τᾶλλα κινεῖ. — ἐξ ἀνάγκης ἄρα ἐστὶν ὄν· καὶ ὅ ἀνάγκη, καλῶς καὶ οὕτως ἀρχή. — ἐκ τῆς αὐτῆς ἄρα ἀρχῆς ἡρτῆται ὁ οὐρανὸς καὶ ἡ φύσις. Cf. de Gen. et Corr. i. 7.*

<sup>305</sup> De Gen. et Corr. i. 6. *ὥστε εἴ τι κινεῖ ἀκίνητον ὄν, ἐκείνο μὲν ἂν ἄπειρο τοῦ κινήτου, ἐκείνου δὲ οὐδέν. φαμέν γὰρ ἐνίοτε τὸν λυπούντα ἄπτεσθαι ἡμῶν, ἀλλ' οὐκ αὐτοὶ ἐκείνον.*

pure form not only the faculty to be moved, but, generally, every potentiality; and it has, consequently, the appearance of an inconsistency with his notion of the highest principle, when he nevertheless ascribes to it the faculty to move,<sup>306</sup> or, indeed, an infinite faculty of moving, that is, the infinity of an eternal movement.<sup>307</sup> But the doctrine of Aristotle appears in a still grosser light, when he proceeds to determine the action of God in the movement of the world, and, with this view, advances the question, whether the centre or circumference is the seat of the prime mover, from which it imparts motion to the whole system. He places it in the latter because the motion of the circumference is the most rapid, and that which is moved most rapidly must be nearest to the source of motion.<sup>308</sup> However little disposed we may be to lay undue importance upon such occasional statements, or, still less, to draw consequences from them, still we must admit that they seem to afford direct proof that the attempt of Aristotle to give a positive theory of God, and his relation to the world, without recourse to any mythical mode of exposition, has led him to advance formulæ, which greatly misrepresent his own better conviction.

<sup>306</sup> Phys. viii. 6. *κινητικὸν δ' ἐτέρου.*

<sup>307</sup> Ib. c. 10; Met. xii. 7.

<sup>308</sup> De Cælo, i. 9; Phys. viii. 10. *ἀνάγκη δὲ ἡ ἐν μέσῳ ἢ ἐν κύκλῳ εἶναι. αὗται γὰρ αἱ ἀρχαί. ἀλλὰ τάχιστα κινεῖται τὰ ἐγγύτατα τοῦ κινουμένου τοιαύτη δ' ἡ τοῦ ὅλου κίνησις· ἐκεῖ ἄρα τὸ κινουόν.* This passage is generally supposed to be the source of the statement that Aristotle makes God to be the limit of heaven. See Sext. Emp. Hyp. Pyrrh. iii. 218; adv. Math. x. 33. But it may have also arisen out of the doctrine that God is the form of the world. The objections which, in consequence, have been made to Aristotle's theology, are searchingly examined by I. S. Vater, *Vindiciæ Theologiæ Aristotelis*. Hal. 1795.

As, now, we have come upon the supreme and ultimate principle of Aristotle's general theory, we may proceed to give a complete estimate of it, and to determine its scientific value. According to Aristotle, the paramount object of science is the investigation of the grounds of phenomena. Now, in reference to the principles of form, to which, as we have already seen, those of motion and of the end are ultimately reduced, these principles are all held together in one supreme first cause, God, in which last ground alone they are fully knowable. Moreover, Aristotle labours to prove not only that we may attain to conceptions correspondent to all objects, but also that, for every truly philosophical mind, science adequately expresses the truth of things; and in the same manner as Plato had shown that God is the unity both of science and substance, so he maintains that God is alike intelligence and the intelligible. This unquestionably implies that the principles and essence of things, so far as they are actual, and not merely potential, must be, without exception, of a rational nature; for it is only on this condition that they can be one with reason, and intelligible. But the knowable and the object of science, is the real only, and this is, at the same time, the rational. And this result is the only one which can satisfy the reason in its pursuit of science.

But, beside the formal, there is also a material ground of phenomena. This, likewise, Aristotle labours to make accessible to knowledge, or, at least, to distinct consciousness. For he looks upon the soul as, in some sort, containing within itself

whatever is ; its science is, so to speak, the thing known ; its sensation, the object perceived.<sup>309</sup> Aristotle succeeds in making the material, if not entirely, at least partially known, by removing the contrariety between the material and the intellectual cause of the world, and making the former, to be potentially, that which the latter is both in actuality and in operation. Consequently, in whatever possesses matter there is, potentially, everything that can be an object of understanding.<sup>310</sup> We formerly noticed that Aristotle did not look upon matter as a cause independent of the end ; consequently, he might well say that nothing is opposed to the first cause.<sup>311</sup> Matter, which is requisite for the existence of the universe, is nothing, actually ; it may rightly be called a nonentity, so that God would have created all out of nothing.<sup>312</sup> Even privation, which is directly opposed to form, is regarded by Aristotle as admitting, in a certain degree, of cognition ; for it may be known, in some measure, from its contrary, just as black, or bad, are known by the absence of their opposites.<sup>313</sup>

But even this limitation, ‘in some measure,’ which, with Aristotle, stands so frequently in the place of a simple affirmation or negation, shows

<sup>309</sup> De An. iii. 8. ἡ ψυχὴ τὰ ὄντα πῶς ἐστὶ πάντα. ἡ γὰρ αἰσθητὰ τὰ ὄντα ἢ νοητά, ἐστὶ δ’ ἡ ἐπιστήμη μὲν τὰ ἐπιστητά πως, ἡ δ’ αἴσθησις τὰ αἰσθητά.

<sup>310</sup> Ib. c. 4. ἐν δὲ τοῖς ἔχουσιν ὕλην δυνάμει ἕκαστόν ἐστιν τῶν νοητῶν.

<sup>311</sup> Met. xii. 10.

<sup>312</sup> De Gen. et Corr. i. 3. τρόπον μὲν τινα ἐκ μὴ ὄντος ἀπλῶς γίνεται, τρόπον δὲ ἄλλον ἐξ ὄντος αἰεί· τὸ γὰρ δυνάμει ὄν, ἐντελεχεία δὲ μὴ ὄν ἀνάγκη προϋπάρχειν.

<sup>313</sup> De An. iii. 6. — δηλοῦται ὥσπερ ἡ στέρησις. καὶ ὁμοίως ὁ λόγος ἐπὶ ἄλλων, οἷον πῶς τὸ κακὸν γνωρίζει ἢ τὸ μέλαν· τῷ ἐναντίῳ γὰρ πως γνωρίζει.

that there still remains a something in objects, which eludes cognition. This is the obscure point in Aristotle's theory, which, even while he strives to keep it out of view as much as possible, and, as it were, to render it invisible by distance or diminution, remains, nevertheless, in the back-ground, however indistinctly traceable. So far as there is something in matter which is opposed to form, even though it be only relatively, there must, in the same degree, be a something unknowable. On this account, even God does not conceive of all as of such as it is, but merely of the best and the most beautiful;<sup>314</sup> and the soul is unable to know the sensible wholly and exactly such as it is, but the objects of its thoughts are merely the forms of the sensible; for the stone is not in the soul, only its form.<sup>315</sup> Matter, in and for itself, inasmuch as it is infinite, cannot be known, either now or ever, for it has no form;<sup>316</sup> and even though it is nothing but a mean by which the intelligible form is realised, still this mean is, in fact, not perfectly suitable to the end for which it is employed, for the end which it is designed to realise never attains to a perfect actuality. It is true, that matter is represented as purely passive, as having no power, but constrained to adjust itself to every operation upon it; but how is it, then, that it is, nevertheless, allowed to possess a reaction upon the organisations

<sup>314</sup> Met. xii. 9.

<sup>315</sup> De An. iii. 8. τῆς δὲ ψυχῆς τὸ αἰσθητικὸν καὶ τὸ ἐπιστημονικὸν δυνάμει ταυτὸν ἐστὶ, τὸ μὲν ἐπιστητόν, τὸ δὲ αἰσθητόν. ἀνάγκη δ' ἢ αὐτὰ (sc. τὰ πράγματα) ἢ τὰ εἶδη εἶναι. αὐτὰ μὲν γὰρ δὴ οὐ. οὐ γὰρ ὁ λίθος ἐν τῇ ψυχῇ, ἀλλὰ τὸ εἶδος.

<sup>316</sup> Phys. iii. 6. διὸ καὶ ἄγνωστον ᾗ ἄπειρον· εἶδος γὰρ οὐκ ἔχει ἢ ὅλην.

in the world? What is the cause that all these organisations are perishable, or, at least, subject to alternative motions? It is the nature of necessity, which allows not a perfect existence to the things set in movement by God, and this nature of necessity, is, according to Aristotle, the same as matter.

In every system of philosophy, an error of principle, like a biting cancer, spreads its evil tendency on all sides; and thus, in the case of Aristotle, the conception of matter, which was intended to conceal much that was vicious in his theory of the world, has only increased the evil he sought to remedy. Similarly is it with his conception of infinity in the world, whether spacial or temporal: it is resolved into matter, and thereby rendered unintelligible. But this is still more strikingly the case in his mode of reducing many natural causes to matter simply, by arguing that many things come to pass merely because they are necessary;<sup>317</sup> and although end, or design, rules the world for the most part, still accident and chance are not without their influence in the formation of things.<sup>318</sup> Moreover, the observation of the many perishable productions of nature, leads to the idea that the reason of their not participating always in entity is their great distance from the source of eternal motion: <sup>319</sup> as if this principle were unable to pervade the whole system, and all its parts, with equal energy and power!

<sup>317</sup> De Part. An. i. 1.

<sup>318</sup> Phys. ii. 5.

<sup>319</sup> De Gen. et Corr. ii. 10. *ἔπει γὰρ ἐν ἅπασιν αἰεὶ τοῦ βελτίονος ὀρίγισθαί φασιν τὴν φύσιν, βέλτιον δὲ τὸ εἶναι ἢ μὴ εἶναι, — τοῦτο δ' ἐν ἅπασιν ἀδύνατον ὑπάρχειν διὰ τὸ πόρρω τῆς ἀρχῆς ἀφίστασθαι, κ. τ. λ. Cf. Phys. viii. 10.*

These inconsistent views and ideas suggest the same remark that our notice of the Platonic theory rendered necessary : that in every explanation of the mundane system, a principle of necessity, gradually, and, as it were, imperceptibly, takes its place alongside of the divine and intellectual power. The only difference, in this respect, between the master and the disciple, is this, that the latter does not, like the former, ascribe the imperfection of the world to the nature of subordinate things, but, at once, without any subtle attempt to explain the fact, admits the coexistence of matter and becoming, with God from all eternity. This admission does not, it is true, limit the activity of God in himself, or his immutable contemplation of himself ; but, still, his position relatively to mundane things becomes, in consequence, somewhat singular and strange. For, it is not God who gives them their potentiality to become and to be ; this faculty, on the contrary, lies in matter ; and it is only their attainment to actuality, that can be regarded as the effect of God's action on the world. And, even in this operation, God acts, in a manner, indifferently. For although, so far as he is represented to be perfect life and activity, he stands in a closer relation to the mundane life than the God of Plato does ; and in so far, also, as he indicates the moving cause of things, he appears to come into closer contact with them ; but when we proceed to inquire how, and by what, God moves the world, it appears that he does not enter actively into its formation, but only that he permits the different forms to arise in the moved things.



However true the thought may be, that God, as perfectly good and the object of desire, sets things in motion by being desired of them, it must, nevertheless, be confessed, that it requires some supplementary determinations, if we would not have it appear that the world is not so much moved by God, as by itself in that it desires God. We may admit either explanation to be true ; still, the connecting link between them is wanting. On this point, we must acknowledge, with respect to Aristotle as well as Plato, that it was not given to their age to apprehend aright, and in its whole truth, the relation of the divine and the mundane. Both saw, rightly, that all power and all true entity must be ascribed to God ; and that, at the same time, the truth and reality of the world must be admitted ; but they were equally unable to trace and determine the connection of these two verities.

But, whatever may be its defects, Aristotle's general view is truly sublime. Setting out from a clear conviction that human science must rest upon fugitive experience and the observation of phenomena, he was led thereby to form an idea of the highest ground of all things, as an energy, activity, and life ; as a life, that is, in unchangeable form,—a life, which is, at the same time, all essence. God, the object of science, he regarded not as a dead perfection, as a pure notion apart from all life in sensible phenomena,<sup>320</sup> but as a living and yet all-

<sup>320</sup> I make it a point to abstain from using the word 'abstract,' which Aristotle might have employed, if he had so chosen, when speaking of God. Aristotle distinguished τὰ χωριστά, the insensible—the abstracted from the sensible, and τὰ ἐξ ἀφαιρέσεως, or τὰ ἐν ἀφαιρέσει ὄντα, λεγόμενα—sorts of abstract phenomena, which do not present any form, by which he understands

perfect being. This, undoubtedly, is no novel or original view; on the contrary, most of the earlier philosophers were constantly approaching more and more to it; and it floated, more or less distinctly, before the minds of Socrates and Plato. But it is in this that the progress of philosophy consists, that what was originally the object of an obscure and unconscious pursuit, ultimately attains to clear and distinct enunciation. Of Aristotle it may be truly said, that he was the first of the Socraticists to reconcile completely the idea of life with that of entity, and thereby gave a wide extension to the domain of philosophy. This he accomplished by the notion of Energy, or Entelechy,<sup>321</sup> which is as peculiar to Aristotle as that of the *Idea* to Plato.<sup>322</sup>

generally the mathematical. The former is applicable to God, but not the latter. It is manifest that the word 'abstract' admits of being taken, as it has been by philosophers, in very different senses.

<sup>321</sup> Between the energy and entelechy of Aristotle there is no essential difference. Both are frequently combined together as equivalent. Of the entelechy a definition is given de An. ii. 4. τοῦ δυνάμει ὄντος λόγος ἡ ἐντελέχεια. In this definition it is necessary to bear in mind that λόγος and εἶδος are interchangeable in Aristotle. According to this definition the entelechy indicates the form of the material. It is, however, too narrow: for the prime substance is also called an entelechy; Met. xii. 8: cf. Trendelenburg. ad Arist. de An. p. 296, etc., who, indeed, attempts to show that the two words are originally distinct, but admits that Aristotle's use of them is far from consistent.

<sup>322</sup> It has been frequently suggested of late, by whom first, I forget, that the difference of the Aristotelian and the Platonic consists in that of the ideas of the ἀρχή and the ἰδέα. But the former notion was current long before Socrates, and is not unknown to Plato. It is more general and indeterminate than that of the Idea, and consequently of the Entelechy, and was, therefore, naturally antecedent to them.

## CHAPTER IV.

### ARISTOTLE'S PHYSICS.

It is clear, from the manner in which Aristotle invariably prefixed to his physiological inquiries an investigation into the principles of nature, that it presupposes, but immediately follows, the first philosophy. These principles are treated in his *Physics*, for the most part, in a less general and less scientific manner than in the first philosophy. But, of these investigations, we are only to notice in the *Physics* what concerns the transition from the general principles of science to the special examination of nature.

In the first place, we must repeat our previous observation, that Aristotle did not suppose it to be possible to pursue the same rigorous method in physics as in the development of the general principles of all science. For the object of physics is not the eternal and unchangeable, but merely that which is possible, and subject to change and becoming;<sup>1</sup> and, consequently, physiology is more akin to uncertain opinion than to strict science.<sup>2</sup> This conclusion naturally impressed itself on Aristotle's mind when he proceeded to investigate singly the special grounds of natural production, and occasionally found it difficult to apply to special cases

<sup>1</sup> *Met.* vi. 1 ; xi. 7.

<sup>2</sup> *Anal. Post.* i. 33. Compare *de Cœlo*, ii. 5, 8, 12.

the general principles of his physiology. In such cases he observes, that in the investigation of the laws of nature, it is not necessary to look to all, but to the greater part; he admits of exceptions to the laws of nature, which he establishes, and reminds his disciple that the object of science is not only that which always, but also that which generally happens.<sup>3</sup> Throughout the consideration of the physiological doctrines of Aristotle, this general admission must be kept constantly in sight, to prevent any unfavourable opinion of the boldness with which he passes from a very inadequate knowledge of nature to the definitive interpretation of its phenomena; for, after having avowed the vagueness of his general theory of physics, he could speak with greater confidence in these particular cases.

The notion of nature is conceived by Aristotle as an opposite to those of reason and of art. Physiology is conversant about that which has reference to body: its object is either corporeal, or it possesses a body, or it is the ground of something corporeal, or of that which belongs to body.<sup>4</sup> By this definition, the soul is brought within the sphere of physical inquiry, while it excludes reason, so far as this is separable from body.<sup>5</sup> According to Aristotle, the opposition between the rational and the natural presents itself mainly in two points. For instance, that which is effected by reason, can, under the same circumstances, be effected in different and opposite ways; reason can produce both

<sup>3</sup> E. g. de Part. An. iii. 2.

— <sup>4</sup> De Cœlo, i. 1; iii. 1.

<sup>5</sup> De An. i. 1; de Part. An. i. 1; Hist. Anim. viii. 1; ix. 1.

good and evil; but not so the natural, for every physical power must, under given circumstances, produce a definite activity.<sup>6</sup> According to this view, the opposition between natural and rational is of the same nature as that between the necessary and whatever has a choice between opposite determinations. But this point of difference between the rational and the natural, Aristotle touches upon only incidentally; but his more usual distinction is drawn from the works which they respectively produce. The works of reason he looks upon as works of art, to which it is the peculiar property to have not in themselves the principle of motion and rest, but receive it from without; whereas all, which is of nature, bears in itself the ground both of motion and rest.<sup>7</sup> This consideration suggested to Aristotle the idea which forms the basis of all physical speculations. Nature is absolutely, and not relatively, a principle, or cause of motion and rest, in that to which it comes originally and not accidentally.<sup>8</sup> According to this explanation, nature is an inward force or energy, and sets things in motion or at rest agreeably to their nature: it is not so much a something which is in aught else, as an independent essence. For this reason, he says of nature,

<sup>6</sup> De Interpr. 13; Met. ix. 2. τῶν δυνάμεων αἱ μὲν ἔσονται ἄλογοι, αἱ δὲ μετὰ λόγον — καὶ αἱ μὲν μετὰ λόγον πᾶσαι τῶν ἐναντίων αἱ αὐταί, αἱ δ' ἄλογοι μία ἐνός. Ib. c. 5.

<sup>7</sup> Phys. ii. 1. τὰ μὲν γὰρ φύσει ὄντα πάντα φαίνεται ἔχοντα ἐν ἑαυτοῖς ἀρχὴν κινήσεως καὶ στάσεως. κλίνη δὲ καὶ ἱμάτιον καὶ εἴ τι τοιοῦτον ἄλλο γένος ἐστίν, ᾧ μὲν τετύχηκε τῆς κατηγορίας ἐκάστης καὶ καθ' ὅσον ἐστὶν ἀπὸ τέχνης, οὐδεμίαν ὁρμὴν ἔχει μεταβολῆς ἑμφυτον. Met. vi. 1; xi. 7.

<sup>8</sup> Phys. i. 1. ὡς οὐσης τῆς φύσεως ἀρχῆς τινὸς καὶ αἰτίας τοῦ κινεῖσθαι καὶ ἡρεμεῖν ἐν ᾧ ὑπάρχει πρῶτως καθ' αὐτὸ καὶ μὴ κατὰ συμβεβηκός. Met. v. 4; vi. 1; xi. 7; xii. 3.

as of God, that it performs nothing without an end;<sup>9</sup> it avoids all infinity;<sup>10</sup> it cannot do all things, and all does not succeed with it:<sup>11</sup> in short, he invariably speaks of nature as a self-active agent. On this account, Aristotle enters into similar investigations to what we previously noticed in the case of being, and examines the two opinions which, respectively, make nature to be matter, or to be form; and in both cases he comes to a similar conclusion, that nature is both form and matter, but the former in a greater degree than the latter.<sup>12</sup> On this account, nature is called an entity, whose unity consists in the combining form; whereas, the elements which by it are held together, form the matter of it.<sup>13</sup> Thus, even in the investigation of individual objects, Aristotle is brought again to the consideration of a general principle, which, as essence, rules over all other essences, however great may be his tendency, at other times, to recognise the essence only in the individual. In this respect, his view only differs from the Platonic theory of ideas, in so far, as, passing over all intermediate terms of species and genera, it advances boldly from the most particular to the most general; and, as it strongly insists that the general, no less than the particular, must not be abstracted from matter,

<sup>9</sup> De Cælo, i. 4. ὁ δὲ θεὸς καὶ ἡ φύσις οὐδὲν μάτην ποιοῦσιν.

<sup>10</sup> De Gen. An. i. 1.

<sup>11</sup> Probl. x. 45.

<sup>12</sup> Phys. ii. 1. ἓνα μὲν οὖν τρόπον οὕτως ἡ φύσις λέγεται ἡ πρώτη ἐκάστω ὑποκειμένη ἕλη τῶν ἰχόντων ἐν αὐτοῖς κινήσειω ἀρχὴν καὶ μεταβολῆς. ἄλλον δὲ τρόπον ἢ μορφήν καὶ τὸ εἶδος τὸ κατὰ τὸν λόγον. — καὶ μᾶλλον αὕτη φύσις τῆς ὕλης. 1b. c. 2; de Part. An. i. 1.

<sup>13</sup> Met. vii. 17. — φανερὸν δ' ἐν καὶ αὕτη ἡ φύσις οὐσία, ἣ ἐστὶν οὐ στοιχεῖον, ἀλλ' ἀρχή· στοιχεῖον δ' ἐστὶν εἰς ὃ διαιρεῖται ἐνυπάρχον ὡς ὕλην.

but that every physical investigation must take into consideration matter as well as form.<sup>14</sup>

It is evident that, in these disquisitions, Aristotle does not make any distinction between nature and the universal mundane force. By nature he understands that which works in all things, and is the ground of their existence and development. Consistently with this view, he describes the eternal motion in the world as the life of all naturally related things,<sup>15</sup> and he seems inclined to adopt the opinion, that a life-giving heat pervades the universe, and that, in a certain sense, all is endowed with a soul.<sup>16</sup> And, accordingly, we shall not be far wrong if we ascribe to this theory the view which considers nature and the world to be a living being.<sup>17</sup> He distinguishes, it is true, ensouled and soulless, living and lifeless beings; and, of the latter, he expressly teaches that they do not move themselves, but receive motion from without;<sup>18</sup> still he thinks that even lifeless things possess a certain impulse according to their several natures, since, he says, they do not it is true move them-

<sup>14</sup> Phys. ii. 2.

<sup>15</sup> Ib. viii. 1. *πότερον δὲ γέγονε ποτε κίνησις οὐκ οὔσα, πότερον καὶ φθίρεται πάλιν οὕτως ὥστε κινεῖσθαι μηδέν; ἢ οὔτε ἐγένετο οὔτε φθείρεται, ἀλλ' αἰεὶ ἦν καὶ αἰεὶ ἔσται καὶ τοῦτ' ἀθάνατον καὶ ἀπανστον ὑπάρχει τοῖς ὄσιν, ὅλον ζωὴ τις οὔσα τοῖς φύσει συνειστώσι πᾶσιν;*

<sup>16</sup> De Gen. An. iii. 11. *γίνεται δ' ἐν γῇ καὶ ἐν ὑγρῷ τὰ ζῶα καὶ τὰ φυτὰ διὰ τὸ ἐν γῇ μὲν ὑπάρχειν ὕδωρ, ἐν δ' ὕδατι πνεῦμα, ἐν δὲ τούτῳ παντὶ θερμότητα ψυχικὴν, ὥστε τρόπον τινὰ πάντα ψυχῆς εἶναι πλήρη.*

<sup>17</sup> De Plantis, i. 1, speaks in a similar manner of *ἀρχὴ ἐν τῇ ψυχῇ τοῦ ζώου*, but the passage is too confused and intricate for any use to be made of it. It was clearly in accordance with Aristotle's own statements, that his truest disciple, Eudemus, taught that heaven moves itself like an animal. Simpl. Phys. fol. 283. b. Cf. de Cælo, ii. 2.

<sup>18</sup> E. g. Phys. viii. 4.

selves freely, but still, on the other hand, they are not constrained by any extrinsecal power.<sup>19</sup> According to this doctrine, therefore, the moving force, in things, which are without life, is the universal nature, whereas things with life enjoy a special moving force, which, however, is derived from the general force of nature. Thus does Aristotle derive all phenomena from an inner force of nature; and, in the determination of the first principle, all his physiology is of a dynamical character; but, at the same time, he admits the mechanical physiology into his explanation of the secondary principles; as, for instance, in the distinction he draws between natural and constrained motion. According to Aristotle, the dynamical motion is the ruling and original, but all constrained motion is merely secondary and subordinate, and is occasioned by one body, which, in moving itself according to its nature, constrains another to move contrary to its proper direction.<sup>20</sup>

With this dynamical tendency of his physics, the teleological speculations of Aristotle are closely connected. All becoming has an end in view; and nature, so far forth as it is a becoming, is merely the way to nature.<sup>21</sup> Consequently, the most im-

<sup>19</sup> Thus of the motion of the stone downwards, and of fire upwards. *Eth. Eud. ii. 8.* τοῦτο δ' ὅταν κατὰ τὴν φύσει καὶ καθ' αὐτὰ ὁρμὴν φέρεται, οὐ βίᾳ οὐ μὴν οὐδ' ἐκουσίᾳ λήγεται, ἀλλ' ἀνώνυμος ἢ ἀντίθεσις. Different herefrom is the view, *Magn. Mor. i. 4*, which denies to the *θρεπτικόν* and to fire any ὁρμή: but this, even, is only denied in reference to some other external object.

<sup>20</sup> *De Cælo, ii. 3.* ὕστερον δὲ τὸ παρὰ φύσιν τοῦ κατὰ φύσιν καὶ ἐκστασις τίς ἐστιν ἐν τῇ γενέσει τὸ παρὰ φύσιν τοῦ κατὰ φύσιν. *Ib. c. 13.* εἰ γὰρ μηδεμία φύσει κίνησις ἐστιν αὐτῶν, οὐδὲ βίαιος ἔσται. *Ib. iii. 2.*

<sup>21</sup> *Phys. ii. 1.* ἔτι δ' ἡ φύσις ἢ λεγομένη ὡς γένεσις ὁδὸς ἐστιν εἰς φύσιν.



portant problem of physiology is, to determine those ends for the sake of which phenomena exist, or which they are intended to accomplish.<sup>22</sup> With the discovery of these ends, the investigation of the form is connected, which, as we have already seen, constitutes the pure essence and the end. Here, however, it must be observed, that the notion of form is not maintained so rigorously in the *Physics* as in the *Logic*. In the latter, it indicated something purely intellectual, but in the former it is employed to represent the exterior configuration—the co-ordination of the different elements of the corporeal into a determinate shape or figure. To such confusion of ideas, the speculations of physiology lead but too easily; this, moreover, is a fault but too common to the Greeks, and it led even Plato to confound the beautiful with the good. Of this modified usage of the word ‘form’ we shall find many instances in the details of Aristotle’s *Physics*, but in general it is taken in the following sense. Nature is regarded as the cause of order, i. e. of a certain relation among things;<sup>23</sup> and, like art, it requires proportion and symmetry<sup>24</sup>; and form is the force which combines and holds together the elements in order.<sup>25</sup>

But form, in nature, being viewed in this light,

<sup>22</sup> *Ib.* ii. 9; de Part. An. i. 1.

<sup>23</sup> *Phys.* viii. 1. ἡ γὰρ φύσις αἰτία πᾶσι τάξεως. — τάξις δὲ πᾶσα λόγος. In the Greek, the term λόγος is ambiguous, not merely as regards the expression, but even in the thought. Aristotle plays with the terms λόγος, relation, notion, form, in the same way as our own philosophers do with other equivocal words.

<sup>24</sup> *De Gen. An.* iv. 2. οὐ μὲν ἀλλὰ καὶ δεῖ συμμετρίας πρὸς ἄλληλα. πάντα γὰρ τὰ γινόμενα κατὰ τέχνην ἢ φύσιν λόγῳ τινὶ ἐστί.

<sup>25</sup> *Met.* vii. 17 fin.

it cannot, of necessity, be conceived of as without matter. For the order and symmetry which is to be produced in the whole by the combining energy of form, cannot be an object of thought apart from the elements which are held together by form, and these elements are the matter of the essence.<sup>26</sup> Thus, then, the investigation into matter necessarily enters, however subordinately, into all physical speculations. It must first be shown that a particular phenomenon has a certain definite end, and then, that something is accomplished necessarily for the sake of that end;<sup>27</sup> but that, which is necessarily, is matter. Many things, therefore, in nature, serve an end only indirectly. It is in this manner that Aristotle admits the imperfection of nature, which, indeed, invariably pursues the good, but is, nevertheless, let, and hindered, in many respects, by the nature of its necessary means. This we have remarked in its general aspect: and we shall only add, in the present place, that the principle, admitted by Aristotle, that a certain limiting necessity enters into the creations of the self-developing nature, finds its proper place in his *Physics*. Indeed, it is a proof of the deep insight which Aristotle had opened for himself into the grounds of natural phenomena, that he acknowledged nature to be an artist, working with an unconscious impulse, and not with perfect consciousness of its ends and operations;<sup>28</sup> it is not godlike,

<sup>26</sup> Ib. xiv. 2. τὰ δὲ στοιχεῖα ὅλη τῆς οὐσίας.

<sup>27</sup> De Part. An. i. 1 fin. ζικτίον δ' οὕτως, οἷον ὅτι ἐστι μὲν ἡ ἀναπνοὴ τοῦδε χάριν, τοῦτο δὲ γίγνεται διὰ τὰδε ἐξ ἀνάγκης.

<sup>28</sup> Phys. ii. 8.

only demonic.<sup>29</sup> And even in physics, the same law holds which regulates all human knowledge; that which is prior in essence, is posterior in production; disorderly matter, and becoming, must first be; and, out of them, the more perfect form, and the essence of every individual thing, may be formed subsequently.<sup>30</sup> It is easier for nature, as for art, to produce the bad, than the excellent; the first and imperfect nature is easily effected, but it is a slow and painful work for nature to attain to its perfect end; it is only rarely, and after many trials, that nature arrives, at last, at excellence.<sup>31</sup>

It is from this point of view that we must estimate the motives which lead Aristotle to reckon accident and chance among the efficient causes of nature. Whatever is effected in nature is either done for the sake of some end, or else is a collateral result of what is so.<sup>32</sup> For as nature does not fully accomplish its proper work immediately, it performs much merely conditionally; in its pursuit of a particular end, it meets with something, which, with such an end in view, cannot be neglected;<sup>33</sup> this is the accidental, and it is not accomplished in obedience to the ordinary laws which are necessary

<sup>29</sup> De Div. per Somn. 2. ἡ γὰρ φύσις δαιμονία, ἀλλ' οὐ θεία.

<sup>30</sup> De Part. An. ii. 1. ἐπεὶ δ' ἐναντίως ἐπὶ τῆς γενέσεως ἔχει καὶ τῆς οὐσίας· τὰ γὰρ ὕστερα τῇ γενέσει πρότερα τὴν φύσιν ἐστί, καὶ πρῶτον τὸ τῇ γενέσει τελευταῖον· οὐ γὰρ οἰκία πλίνθων ἐνεκὲν ἐστί καὶ λίθων, ἀλλὰ ταῦτα τῆς οἰκίας· ὁμοίως δὲ τοῦτ' ἔχει καὶ περὶ τὴν ἄλλην ὕλην. — τῷ μὲν οὖν χρόνῳ προτίραν τὴν ὕλην ἀναγκαῖον εἶναι καὶ τὴν γίνεσιν, τῷ λόγῳ δὲ τὴν οὐσίαν καὶ τὴν ἐκάστου μορφήν. Met. ix. 8.

<sup>31</sup> Probl. x. 45.

<sup>32</sup> De An. iii. 12. ἕνεκά του γὰρ πάντα ὑπάρχει τὰ φύσει, ἢ συμπτώματα ἵσται τῶν ἕνεκά του.

<sup>33</sup> Phys. ii. 5; Met. xi. 8.

to the attainment of the prescribed end, but appears to be a sign and a wonder (τέρας). Of such prodigies Aristotle especially notices abortions, which he explains as mistakes or failings of nature. Both art and nature may occasionally fail, because they do not accomplish their works by rational reflection.<sup>34</sup> Aristotle, however, observes, that these prodigies are not against nature absolutely, but only against its more ordinary laws. In general, a prodigy is the result of the weakness of nature according to form, whereby it is unable to control the nature according to matter.<sup>35</sup> The term abortion, or prodigy, is evidently employed here in a very wide sense : for we may say, in perfect agreement with Aristotle, that nature is, at most, but in a constant endeavour to shape matter into form, and that, consequently, in the whole system of nature, there must always be a residuary portion of matter not yet reduced into order by form ; and, consequently, nature, so far as it possesses changeable matter, can only produce monsters and abortions. To this extent, however, Aristotle has not followed out his view ; but, on the other hand, he gives, in the details of his physical theory, very great latitude to the exceptions from the general laws, to accomplish which is the object of nature's

<sup>34</sup> Phys. ii. 8.

<sup>35</sup> De Gen. An. iv. 4. ἔστι γὰρ τὸ τέρας παρὰ φύσιν τι, παρὰ φύσιν δ' οὐ πᾶσαν, ἀλλὰ τὴν ὡς ἐπὶ τὸ πολὺ. περὶ γὰρ τὴν αἰὲ καὶ τὴν ἐξ ἀνάγκης οὐδὲν γίνεται παρὰ φύσιν, ἀλλ' ἐν τοῖς ὡς ἐπὶ τὸ πολὺ μὲν οὕτω γινομένοις, ἐνδεχομένοις δὲ καὶ ἄλλως, ἐπεὶ καὶ τούτων ἐν ὅσοις συμβαίνει παρὰ τὴν τάξιν μὲν ταύτην, αἰὲ μέντοι μὴ τυχόντως, ἥττον εἶναι δοκεῖ τέρας διὰ τὸ καὶ τὸ παρὰ φύσιν εἶναι τρόπον τινὰ κατὰ φύσιν, ὅταν μὴ κρατήσῃ τὴν κατὰ τὴν ὕλην ἢ κατὰ τὸ εἶδος φύσιν.

efforts. For instance, he calls it an abortion when a male child does not resemble its father ; and the female child he looks upon as an abortion in a less degree, which he accounts for by the insufficient energy of the male as the forming principle.<sup>36</sup> Such exceptions from the most general laws become still more extensive if certain kindred ideas be taken as equivalent and identical. Thus abortion is a species of deformity ;<sup>37</sup> or, perhaps, we must rather say, deformity is a species of abortion. But, in either case, the form has evidently been without sufficient force to master or to shape the fitting matter. But the notion of deformity is employed by Aristotle in a very wide sense. Not only does he comprise under the female of every species, as compared with the male,<sup>38</sup> but even entire species, as, for instance, the mole.<sup>39</sup> To this also must be referred the distinction which he draws between perfect and imperfect animals,<sup>40</sup> and the character of dwarf which he gives to all animals except man.<sup>41</sup> As, now, in such deformities, there is a deficiency of matter, there is, also, another species wherein an excess of matter (*περίττωμα*) enters into the organised nature.<sup>42</sup> Of such, Aristotle adduces numerous instances ; comprising, under this head,

<sup>36</sup> De Gen. An. iv. 3.

<sup>37</sup> L. I. fin. *καὶ γὰρ τὸ τέρας ἀπηρία τίς ἐστι.*

<sup>38</sup> De Gen. An. ii. 3. *τὸ γὰρ θῆλυ ὥσπερ ἄρρεν ἐστὶ πεπηρωμένον.* Probl. x. 8.

<sup>39</sup> Hist. An. iv. 8. *πλὴν εἴ τι πεπήρωται γένος ἐν οἷον τὸ τῶν ἀσπαλάκων.* According to de Plant. i. 1, plants also are imperfect creatures.

<sup>40</sup> De Gen. An. ii. 1.

<sup>41</sup> De Part. An. iv. 10. *πάντα γὰρ ἐστὶ τὰ ζῶα νανώδη τᾶλλα παρὰ τὸν ἀνθρώπον.*

<sup>42</sup> De Part. An. iv. 2. *ὥστε δοκεῖν τέρας εἶναι τὴν ὑπερβολήν.*

not merely what we should denote as a useless process, but even the necessary organs of life. On this point, however, we must defer our more special explanations. Of these useless appendages, Aristotle is wont to admit that, in and by themselves, they are not for the sake of any end, and although nature may occasionally employ them profitably—like a good husbandman, who will throw nothing away<sup>43</sup>—still this is not always the case, and much exists only of necessity.<sup>44</sup>

These are not merely occasionally advanced views, but they express the pervading principle of the Aristotelian physiology. For, as he sought to investigate the ends of nature's operations, he could not fail to adopt ultimately some general end of nature. Whatever, therefore, does not attain to this end, must be looked upon as imperfect, and as owing its imperfection to matter, which refuses to adjust itself to the form. Everything of this kind exists only as an exception, whereas the general rule, by which nature operates in its formations, is the rule of good, towards which nature everywhere tends, but does not always attain to it. That Aristotle understood this end in the same light as Plato, is manifest from the general principles of his theory. The things in the world must participate in the divine, and, the more highly they do so, the more nearly do they arrive at the end of nature or to good. But of all the living creatures on the

<sup>43</sup> De Gen. An. ii. 6.

<sup>44</sup> De Part. An. l. i. περίττωμα — καὶ οὐχ ἕνεκα τινός. — καταχρήται μὲν οὖν ἐνίοτε ἡ φύσις εἰς τὸ ὠφέλιμον καὶ τοῖς περιττώμασιν, οὐ μὲν διὰ τοῦτο δεῖ ζητεῖν πάντα ἕνεκα τίνος. ἀλλὰ τινῶν ὄντων τοιούτων ἕτερα ἔξ ἀνάγκης συμβαίνει διὰ ταῦτα πολλά.

earth man alone lives well, because he only, or at least in the greatest degree, participates in the divine.<sup>45</sup> The soul is the end and the essence of the body;<sup>46</sup> and the several members of the body are so many machines, which are severally designed for a particular use and operation; whereas the whole body is for the sake of a perfect activity, that is, of the soul.<sup>47</sup> The souls of all other animals, which give but indistinct traces of the human, may be compared to the souls of children;<sup>48</sup> and, consequently, in them, the end of nature is by no means perfectly accomplished. Thus, then, does Aristotle, no less than Plato, make the human animal, and the male too, to be the end and the centre of all earthly natures.<sup>49</sup> All else beneath the moon is, as it were, an unsuccessful attempt of nature to produce the male man. Aristotle, however, exhibits this idea in a different form: for he does not make the individual man pass through the whole series of nature's creatures in an endless existence, but, despite all appearances to the contrary, he despises the individual, even more than Plato, and makes the end of universal to be none other than to produce in the individual, as its work, now a closer, now a more remote, approximation to the most perfect species of life.

<sup>45</sup> De Part. An. ii. 10.

<sup>46</sup> De Gen. An. ii. 4; Met. vii. 11.

<sup>47</sup> De An. i. 3; de Part. An. i. 5. *ἐπεὶ δὲ τὸ μὲν ὄργανον πᾶν ἕνεκά του, τῶν δὲ τοῦ σώματος μορίων ἕκαστον ἕνεκά του, τὸ δ' οὐ ἕνεκα πράξις τις, φανερόν ὅτι καὶ τὸ σύνολον σῶμα συνέστηκε πράξειώς τινος ἕνεκα πλήρους.* — *ὥστε καὶ τὸ σῶμά πως τῆς ψυχῆς ἕνεκεν.*

<sup>48</sup> Hist. An. viii. 1. There is only an indistinct trace of νοῦς, and of the divine in animals. Cf. Hist. An. ix. 3, 7, in.; 17, in.; de Gen. An. iii. 10.

<sup>49</sup> Aristotle goes so far in this direction, as to make the tamed animals to be more perfect than the wild. Probl. x. 45. Man even is a tame animal.

Thus much we have considered necessary to notice preliminarily, concerning the general principles on which Aristotle's physics are founded. We shall now proceed to details; but, confining ourselves to that which is strictly philosophical, we shall omit whatever is simply of an empirical character. Aristotle usually commences his investigations into the several parts of nature with a statement of the general conditions of natural existence. These are as follow. As nature is the ground of motion and of rest, and rest is only possible where motion can take place,<sup>50</sup> motion is a condition of all nature.<sup>51</sup> On this account, as we have already seen, Aristotle rejects all those theories which deny motion, as equally denying nature itself. Now, the next question is to prove, that motion is possible, and under what conditions. In this he is assisted by the doctrine of form and matter; but the inquiry itself does not belong to physics, but to the first philosophy. But the investigations into the spacial motion of bodies, which are the objects of physics, belong properly to this sphere of inquiry.

Motion, as defined by Aristotle, is the activity of that which is, according to potentiality, so far as it is potentially.<sup>52</sup> This implies that it is a middle term, between merely potential entity and the perfectly realised activity; in which there is nothing that is, merely according to potentiality. For motion is neither earlier nor later than the

<sup>50</sup> Phys. iii. 2.

<sup>51</sup> Phys. iii. 1.

<sup>52</sup> Phys. iii. 1; Met. xi. 9. τὴν τοῦ δυνάμει, ἢ τοιοῦτόν ἐστιν, ἐνέργειαν λέγω κίνησιν.



time in which that which exists potentially attains its realisation; earlier, may be said of that which is, according to potentiality; later, of that which is, actually.<sup>53</sup> Consequently, motion belongs neither to potentiality, nor to energy; for, neither that which potentially, nor that which actually possesses magnitude, moves itself.<sup>54</sup> Now, motion being a middle term between these two, and forming the transition from the one to the other, it must belong to what is continuous; and, as it is in the continuous that the infinite first appears, motion must presuppose space and time, which are either limited or infinite; and, consequently, all physical investigations must enter upon the examination of the notion of infinity.<sup>55</sup>

It was formerly shown in what manner Aristotle reduced the idea of infinity to that of matter; consequently, we have only to show, in the present place, how he combined it with the ideas of space, motion, and time. The infinite is relative to these three notions; it is either in time, in place, or in motion, but not similarly in them all; for the being of the entity in one, is the ground of its being in the others. Aristotle's theory on this point is very complicated; but a full light is thrown upon it by the doctrine, that infinity of time has its ground in the infinity of motion, and this, lastly, in the infinity of space.<sup>56</sup> In the next place, it be-

<sup>53</sup> Ll. 11.

<sup>54</sup> Phys. iii. 2. οὔτε εἰς δύναμιν τῶν ὄντων, οὔτε εἰς ἐνέργειάν ἐστι θεῖναι αὐτὴν ἀπλῶς· οὔτε γὰρ τὸ δυνατόν ποσὸν εἶναι κινεῖται ἐξ ἀνάγκης, οὔτε τὸ ἐνέργειᾳ ποσόν.

<sup>55</sup> Phys. iii. 1, 4.

<sup>56</sup> Phys. iii. 7. τὸ δ' ἄπειρον οὐ ταῦτόν ἐν κινήσει καὶ μεγέθει καὶ χρόνῳ

came necessary to show how infinity in space can be conceived, in order to determine thereby the other modes of infinity. Now, infinity of space does not consist in the infinite extension of the corporeal, for body in space cannot extend itself infinitely, since it is limited by surface.<sup>57</sup> This argument Aristotle terms logical, and proceeds to give a physical proof of it. An infinite body, he observes, must be either simple or composite. If the latter, then its constituent parts, at least, must be either infinite or limited; and, if one of them were infinite, it would necessarily exclude all others. The supposition of an infinite simple body is equally untenable. For, he says, the hypothesis of certain naturalists is groundless, that there is, besides the elements, a perceptible body, which combines within itself all the elements. This physical proof rests, indeed, on an assumption of Aristotle, which, in the first principles of nature, ought not to be assumed. Still more dependent on assumption are his other physical proofs, which set out from the doctrine, that every element tends to its proper place, and that there is a natural above and below, before and behind, and a right and a left in the world.<sup>58</sup> Essentially, these arguments only serve to indicate the connection, in Aristotle's mind, between his general

ὥς μία τις φύσις, ἀλλὰ τὸ ὕστερον λέγεται κατὰ τὸ πρότερον· ὅλον κίνησις μὲν ὅτι τὸ μέγεθος, ἐφ' οὗ κινεῖται ἢ ἀλλοιοῦται ἢ ἀυξάνεται· ὁ χρόνος δὲ διὰ τὴν κίνησιν. The same, nearly word for word, *Met.* xi. 10, fin.; *Phys.* iv. 12. ἀκολουθεῖ γὰρ τῷ μὲν μεγέθει ἡ κίνησις, τῇ δὲ κινήσει ὁ χρόνος τῷ καὶ ποσὰ καὶ συνεχῇ καὶ διαιρετὰ εἶναι.

<sup>57</sup> *Phys.* iii. 5; *Met.* i. 1.

<sup>58</sup> *Ll.* 11.

researches into the principles of nature, and his more special physiological doctrines; and, consequently, the only important point in them to notice, is the general view, that the spacial and the corporeal cannot be conceived of, except as determinately limited. This is the basis of his conclusion, that the world, as corporeal, and as perceptible in space, must have a determinate or limited magnitude.<sup>59</sup> On the same principle he rejects that explanation of infinity, as that beyond which nothing can be taken; and he thinks it may be more correctly defined to be, that beyond which something more may ever be taken;<sup>60</sup> for that beyond which there is nothing, must be complete, and form a whole; and whatever is complete, must possess an end and a limit:<sup>61</sup> and, on this account, nature has a horror of the infinite, for this is the imperfect.<sup>62</sup> Thus, in Aristotle, we meet again with the view which considers the infinite as the indeterminate. This general view Aristotle further strengthens by the argument, that the infinite can neither act, nor suffer, since certain fixed relations are indispensably necessary to action and passion.<sup>63</sup>

As, then, infinity of space is not to be found in extension, we must, perhaps, look for it in infinite

<sup>59</sup> Phys. iii. 7. ὥστε ἐπεὶ ἄπειρον οὐδὲν ἐστὶ μέγεθος αἰσθητόν, οὐκ ἐνδέχεται παντὸς ὑπερβολὴν εἶναι ὠρισμένου μεγέθους· εἴη γὰρ ἂν τοῦ οὐρανοῦ μείζον.

<sup>60</sup> Ib. c. 6. συμβαίνει δὲ τοῦναντίον εἶναι ἄπειρον ἢ ὥς λέγουσιν· οὐ γὰρ οὐ μὴδὲν ἔξω, ἀλλ' οὐ αἰεὶ τι ἔξω ἐστί, τοῦτο ἄπειρόν ἐστι.

<sup>61</sup> L. 1. ἄπειρον μὲν οὖν τοῦτ' ἐστὶν οὐ κατὰ ποσὸν λαμβάνουσιν αἰεὶ τι λαβεῖν ἐστὶν ἔξω· οὐ δὲ μὴδὲν ἔξω, τοῦτ' ἐστὶ τέλειον καὶ ὅλον. — τέλειον δ' οὐδὲν μὴ ἔχον τέλος, τὸ δὲ τέλος πέραις. Cf. de Cælo, i. 1.

<sup>62</sup> De Gen. An. i. 1.

<sup>63</sup> De Cælo, i. 7.

divisibility. The infinite divisibility, not only of space itself, but of all that is spacial, Aristotle holds to be certain, on mathematical principles; whose authority, as the principles also of physics, cannot be called into question.<sup>64</sup> On this account he deems it sufficient to maintain simply, that the doctrines which assume that there is aught indivisible in space, are inconsistent with the principles of mathematics. But that there is nothing indivisible, follows from the continuity of spacial magnitude. Two magnitudes are said to be continuous when the limits of the two are coincident.<sup>65</sup> But such magnitudes cannot be composed of indivisible parts; for, in the parts which border on one another, the limit, or the extremity of the two, must be distinct from that of which it is the limit.<sup>66</sup> Again, every extended magnitude must be divisible into other extended magnitudes.<sup>67</sup> But now, according to this, the infinity does not consist in actual division, but in divisibility—i. e. in division according to potentiality, which, however, can never attain to actuality, since it is impossible to carry on the process to infinity. It consists simply in this, that after every division another is still possible; and, although each division invariably gives a determinate result, still each result is different from

<sup>64</sup> Phys. iii. 7; Met. xiii. 6, 9.

<sup>65</sup> Phys. v. 3. λέγω δὲ εἶναι συνεχές, ὅταν ταῦτὸ γίνηται καὶ ἐν τῷ ἐκατέρου πέρασιν, οἷς ἀπρονται, καὶ ὥσπερ σημαίνει τοῦνομα, συνέχεται. τοῦτο δὲ οὐχ ὁλόν τε δυοῖν ὄντων εἶναι τοῖν ἐσχατοῖν. The same, nearly word for word, Met. xi. 12.

<sup>66</sup> Phys. vi. 1. οὐ γὰρ ἔστιν ἐσχατον τοῦ ἀμεροῦς οὐδέν· ἔτερον γὰρ τὸ ἐσχατον καὶ οὐ ἐσχατον.

<sup>67</sup> 1b. iii. 6.

the preceding.<sup>68</sup> Here the infinity of spacial plenitude, according to subtraction, is first proved; but from it that according to addition immediately follows. Addition is merely the contrary of subtraction; and as more and more can always be taken from a magnitude by infinite division, the body itself may be supposed to have arisen from the infinite accession of its parts.<sup>69</sup> This view of the infinite is essentially different from that of those who extol the infinite as comprising all, and having all within itself; being deceived by the analogy which it bears to a whole. For the infinite is the matter of the perfectness of extended magnitude, and the whole potentially, though not actually; and a whole in reference to other; and it does not comprise, but is itself comprised, so far forth as infinite; but, as matter, it belongs to the notion of part, rather than of whole.<sup>70</sup> Form comprises matter; and the indivisible form gives unity to the infinite multiplicity of matter. On this account number also remains attached to the indivisible, or to unity; but, nevertheless, it may be supposed to go on to infinity, because the division of extended magnitude proceeds to infinity; but this infinity has not any persistence; on the con-

<sup>68</sup> L. I. ὅλως μὲν γὰρ οὕτως ἐστὶ τὸ ἀπειρον τῷ ἀεὶ ἄλλο καὶ ἄλλο λαμβάνεσθαι καὶ τὸ λαμβανόμενον μὲν ἀεὶ εἶναι πεπερασμένον, ἀλλ' ἀεὶ γε ἕτερον καὶ ἕτερον. De Gen. et Corr. i. 3.

<sup>69</sup> Phys. I. I.

<sup>70</sup> L. I. ἐπεὶ ἐντεῦθεν γε λαμβάνουσι τὴν σιμνότητα κατὰ τοῦ ἀπείρου, τὸ πᾶν περιέχον καὶ τὸ πᾶν ἐν αὐτῷ ἔχον διὰ τὸ ἔχειν τινὰ ὁμοιότητα τῷ ὅλῳ. ἐστὶ γὰρ τὸ ἀπειρον τῆς τοῦ μεγέθους τελειότητος ὅλη καὶ τὸ δυνάμει ὅλον, ἐντελεχεία δ' οὐ. — ὅλον δὲ καὶ πεπερασμένον οὐ καθ' αὐτό, ἀλλὰ κατ' ἄλλο· καὶ οὐ περιέχει, ἀλλὰ περιέχεται, ὃ ἀπειρον. — ὥστε φανερον ὅτι μᾶλλον ἐν μορίου λόγῳ τὸ ἀπειρον ἢ ἐν ὅλῳ.

trary, like time, and the number of time, it is always becoming.<sup>71</sup>

It is easy to perceive how motion has part in the infinity of the spacial ; for motion proceeds through the infinite parts of space, and, consequently, is equally continuous as spacial magnitude itself.<sup>72</sup> Nevertheless, with a view to remove, as completely as possible, all the difficulties which belong to this branch of inquiry, Aristotle enters upon an examination of the idea of space itself. The existence of it is universally admitted ; for all men will allow that every entity is somewhere, and that nonentity alone is nowhere.<sup>73</sup> What space is, however, is a more difficult question. That it is different from the objects contained in it, is manifest ; for the same place may be occupied, at different times, by different objects ; and, indeed, it is the observation of this fact that gives rise to the inquiry, what space is.<sup>74</sup> Moreover, space is neither the form nor the matter of things ; for these two are inseparable from the objects themselves ; and it is not, like matter, contained, but contains.<sup>75</sup> Again ; as things are in space, and still the question is legitimate, in what, then, is space itself ? the mode in which space is in aught else, must be distinguished from the mode in which things are in space. It is usual to say of any object, that it is some containing vessel, or in space. If, however, it should be asked, in what, then, is the prime or universal space ? the question must

<sup>71</sup> Ib. c. 7 ; Met. vii. 8 fin.

<sup>72</sup> Phys. iv. 11.

<sup>73</sup> Ib. c. 1, 3.

<sup>74</sup> Ib. c. 4.

<sup>75</sup> Ib. c. 2.

be understood in a different sense, and similar to that in which, when it is asked in what is warmth, and it is answered, in the body; and in what is health, and it is answered, in warmth;<sup>76</sup> for space is, as it were, the limit in the limited.<sup>77</sup> When, on the other hand, it is said of any object, that it is in space, what is meant is, that it is contained within the extreme limits of some other thing, which it does not coincide with, but, nevertheless, touches. According to this explanation, space is the limit, not of the contained, but of the containing body; so far, that is, as the contained body is capable of local motion.<sup>78</sup> Space is an immoveable vessel;<sup>79</sup> nevertheless, whatever is in it may be moved. From this it follows, that only a body which has an external containing body can be said to have magnitude, and not one which is not contained in any other. Heaven is not in space; and, as a whole, is without spacial motion, although, indeed, its parts may move. The universal place in which All is, appears, according to this view, to be the utmost heaven, the quiescent limit of the moving body.<sup>80</sup> It is clearly manifest that Aristotle conceives the idea of space as purely objective, and altogether in a physical sense. This becomes still more obvious when he divides space into its par-

<sup>76</sup> Ib. c. 3.

<sup>77</sup> Ib. c. 5. καὶ ἔστιν ὁ τόπος καὶ ποῦ, οὐχ ὡς ἐν τύπῳ δέ, ἀλλ' ὡς τὸ πέρας ἐν τῷ πεπερασμένῳ.

<sup>78</sup> Ib. c. 4. ἀνάγκη τὸν τόπον εἶναι — τὸ πέρας τοῦ περιέχοντος σώματος· λέγω δὲ τὸ περιεχόμενον σῶμα τὸ κινητὸν κατὰ φοράν.

<sup>79</sup> Ib. c. 2, 4.

<sup>80</sup> Ib. c. 5. καὶ διὰ τοῦτο ἐν τῷ οὐρανῷ πάντα· ὁ γὰρ οὐρανὸς τὸ πᾶν ἴσως. ἔστι δὲ ὁ τόπος οὐχ ὁ οὐρανός, ἀλλὰ τοῦ οὐρανοῦ τι, τὸ ἔσχατον καὶ ἀπτόμενον τοῦ κινητοῦ σώματος πέρας ἡριμοῦν.

ticular spheres, and ascribes a special faculty to every special space. The earth is in water as in its proper place ; similarly, the water in the air, the air in the ether, and the ether in heaven ; but the heaven, lastly, is in nothing beyond, in nothing else, and all these bodies move themselves to their proper places.<sup>81</sup> On this account, Aristotle considers the different relations of place, especially those of above and below, and even right and left, before and behind, to be not merely relative to man, but as relations whose principle is in nature itself ;<sup>82</sup> in short, he regards space as that which indicates, or rather as that which, in a certain manner, is the principle of arrangement in the universe. For, although he does not consider it to be the form of things, he nevertheless makes it determine extrinsically their form ;<sup>83</sup> and, consequently, we must fain admit that Aristotle did not conceive the idea of space in its most extensive sense ; but, at the same time, he ascribed to it a vital importance in reference to the relations of order, which, in his view, constitute the essence of the world.

With such a view, it was only natural that he should find it impossible to conceive of space as without contents. Such, he teaches, would be a vacuum, for vacuum is a space in which there is

<sup>81</sup> Ib. c. 1. *ἔτι δὲ αἱ φοραὶ τῶν φυσικῶν σωμάτων καὶ ἀπλῶν ὁλον πυρὸς καὶ γῆς καὶ τῶν τοιούτων οὐ μόνον δηλοῦσιν ὅτι ἔστι τι ὁ τόπος, ἀλλ' ὅτι καὶ ἔχει τινὰ δύναμιν. φέρεται γὰρ ἕκαστον εἰς τὸν αὐτοῦ τόπον μὴ κωλυόμενον, τὸ μὲν ἄνω, τὸ δὲ κάτω. Ib. c. 5. καὶ διὰ τοῦτο ἡ μὲν γῆ ἐν τῷ ὕδατι, τοῦτο δ' ἐν τῷ αἰέρι, οὗτος δ' ἐν τῷ αἰθέρι, ὁ δ' αἰθήρ ἐν τῷ οὐρανῷ, ὁ δ' οὐρανὸς οὐκ εἶναι ἐν ἄλλῳ.*

<sup>82</sup> Ll. II.

<sup>83</sup> Cf. de Cælo, iv. 3, 4.



nothing, i. e. no body.<sup>84</sup> Accordingly, he attempts to refute the arguments by which the necessity of a vacuum had been maintained. Of these, the most weighty was derived from a consideration of motion. It was supposed, that if all is full, motion must be impossible, since it is indispensable to motion that there should be a space to receive the moved body; which there can not be if all is full, since two bodies cannot, at the same time, occupy the same place. But this argument proves nothing, since the bodies might mutually give space to motion.<sup>85</sup> Again, a vacuum was supposed to be the reason of the fall of bodies, and hence the motion of bodies was derived. But a nicer examination of facts refutes this idea. For every species of motion depends on that of nature; and natural motion would be impossible, if there is no distinction in vacuum, and, consequently, neither upper nor lower; and, consequently, motion cannot be derived from a vacuum, but from the fullness of space.<sup>86</sup> It is scarcely necessary to notice to the reader that here, again, spacial order is regarded as a moving force. Besides this argument against the existence of a vacuum, which is in the direct spirit of his theory, he adduces many others, the object of which is to show that its supposition would render motion impossible. To the proof of it, which was drawn from a consideration of the contrarieties of rarefaction and condensation, of augmentation and diminution, Aristotle opposes his own doctrine of matter. In this doctrine he does

<sup>84</sup> Phys. iv. 7.<sup>85</sup> L. 1.<sup>86</sup> Ib. c. 8.

not explain the origin of dense or rare, great or small, by a mechanical aggregation or segregation, or an existing body, but he supposes matter to be constant, and, bearing in itself a capacity for contraries, to become, at one time, rare and small, at another, dense and large, without giving rise to, or occasioning a vacuum in either case.<sup>87</sup> These are the principal points that Aristotle thought necessary to establish, in opposition to the assumption of a vacuum; their tendency is to show that the hypothesis of a vacuum is not necessary in order that motion and change should be possible, and only so far to controvert the idea as it is subversive of natural becoming. Several other points, which ordinarily suggest the idea of a void, are only slightly touched upon; as, for instance, the conception that there is, without the world, a void, as the place in which the world is; as also the opinion, that, in order that all things should cohere into a continuous unity, there must be a void interval to break the continuity of what fills space.<sup>88</sup> To refute the former point, he need only to appeal to his theory of space; according to which, the world, i. e. the sphere of heaven, is not in space; and, against the latter, to his doctrine that the form or energy of the essence is the separator.<sup>89</sup>

The investigations into infinity and space, naturally suggest that into the nature of time, as the third condition of motion. As the question, what is space? would never be asked if motion were not, so time would not exist for us had we never ob-

<sup>87</sup> Ib. c. 9.

<sup>88</sup> Ib. c. 6.

<sup>89</sup> Met. vii. 13. ἡ γὰρ ἐντελέχεια χωρίζει.

served motion or change; for, if we did not change in thought, nor observed that we changed, time would not have existed for us. If the present did not differ from the past, but the two were identical, there would be no time.<sup>90</sup> Time must either be change, i. e. motion itself, or else some accident of motion. But it is not motion itself; for motion is in something moving, and in some determinate place; neither of which is true of time:<sup>91</sup> consequently, it can only be an accident of motion. As an accident of motion, it participates in the continuity of motion, and spacial magnitude; and, as in these there is a before, so they are also in time. We become conscious of time only by designating motion as earlier and later, by conceiving of its parts as one and other, and by inserting a mean between these two. In the same manner must the mind distinguish two parts of time, as before and behind, and separated by an intermediate *now*, in order to have a distinct knowledge of time. Consequently, time is the number of motion, according to before and after. This is clear from our estimating more or less by number, but the more or less of motion by time. But time is not the number by which we reckon, but the number which is reckoned, and which gives the measure of motion.<sup>92</sup> To this it may be objected, that not only motion, but rest also, is measured by, and is in, time. But time is only incidentally a measure of rest, for this is merely the privation of motion, which is measured by the same measure as motion itself.<sup>93</sup> From the notion

<sup>90</sup> Phys. iv. 11.<sup>91</sup> Ib. c. 10.<sup>92</sup> Ib. c. 11, 12.<sup>93</sup> Ib. 12.

of time it follows, that if the *now* were not, time could not be, for the *now* is the limit between the past and the future ; it holds time together, is the principle of its continuity, and is, in time, what the point is in space.<sup>94</sup> As then time, through the *now*, becomes continuous, it must be infinitely divisible, like space and motion,<sup>95</sup> though, actually, it is never divided into infinity.<sup>96</sup> The *now* itself may be considered indivisible, since it is only the limit, and not a part of time ;<sup>97</sup> and therefore Aristotle observes, in contradiction of Zeno, that in the *now*, nothing can either move or rest.<sup>98</sup> With the idea of time corresponds the doctrine that time could not be if there were not a soul or mind ; if time be the number of motion, and number be impossible without one who numbers, and the cognisant soul have alone the faculty of numbering, then time cannot be without a soul, except so far as it is possible for motion to be without a soul.<sup>99</sup> From this it is most distinctly manifest that Aristotle refers the notion of time, even more than of space, to the simple conception ; and that, on the other hand, he places in that of motion the objective element which is represented in the notion of time. On this account he is unwilling to accede to the opin-

<sup>94</sup> Ib. 10, 11, 12, 13 ; vi. 3.

<sup>95</sup> Ib. iv. 12 ; vi. 1.

<sup>96</sup> De An. iii. 6. ὁμοίως γὰρ ὁ χρόνος διαιρετὸς καὶ ἀδιείρετος τῷ μήκει.

<sup>97</sup> Phys. vi. 3.

<sup>98</sup> L. l. ; ib. c. 8.

<sup>99</sup> Ib. iv. 14. πότερον δὲ μὴ οὐσης τῆς ψυχῆς εἴη ἂν ὁ χρόνος ἢ οὐ, ἀπορήσειεν ἂν τις· ἀδυνάτου γὰρ ὄντος εἶναι τοῦ ἀριθμήσοντος, ἀδύνατον καὶ ἀριθμητὸν τι εἶναι, ὥστε δῆλον ὅτι οὐδὲ ἀριθμός. ἀριθμὸς γὰρ ἢ τὸ ἡριθμημένον ἢ τὸ ἀριθμητὸν. εἰ δὲ μηδὲν ἄλλο πέφυκεν ἢ ψυχὴ ἀριθμεῖν, καὶ ψυχῆς νοῦς, ἀδύνατον εἶναι χρόνον ψυχῆς μὴ οὐσης, ἀλλ' ἢ τοῦτο, ὅ ποτε ὄν ἐστιν ὁ χρόνος, ὅλον εἰ ἐνδέχεται κίνησιν εἶναι ἄνευ ψυχῆς.

ion which makes time consist in the revolution of the heavens, and remarks that this only is the best adapted to serve as the measure of motion, as being both uniform and most generally known.<sup>100</sup> On this account also he denies that time is the cause of production and decay, and merely admits that they take place in time.<sup>101</sup>

These notions of space, motion, and time, are subsequently employed to refute Zeno's arguments against the possibility of motion being conceived. The refutation of Zeno's position, that whatever is in motion must, at the same moment, be also at rest, has already been given. His other arguments are either sophisms, or else based on the assumption that every motion must, in a given and determinate time, pass through infinite space, because the parts of every space are infinite. In opposition to this argument, Aristotle insists on the distinction between infinite in magnitude and infinite in divisibility. The former cannot be passed through in any finite time, but the latter may, because any finite time is itself also infinitely divisible.<sup>102</sup>

Motion, according to Aristotle, is of several kinds. To determine these with precision it is

<sup>100</sup> L. l.

<sup>101</sup> Ib. c. 13. οὐ μὴν ἀλλ' οὐδὲ ταύτην (sc. τὴν φθοράν) ὁ χρόνος ποιεῖ, ἀλλὰ συμβαίνει ἐν χρόνῳ γίνεσθαι καὶ ταύτην τὴν μεταβολήν. In a preceding chapter, Aristotle speaks, it is true, differently, but more indefinitely, on this head.

<sup>102</sup> Ib. vi. 2. τῶν μὲν οὖν κατὰ ποσὸν ἀπείρων οὐκ ἐνδέχεται ἄψασθαι ἐν πεπερασμένῳ χρόνῳ, τῶν δὲ κατὰ διαιρέσειν ἐνδέχεται. Cf. ib. viii. 8. Here the difficulties which are involved in the idea, in the passing through an infinite time or space, are resolved, by making their infinity to be potential only, and not actual. The supposition of the actual division to infinity of space or time, would overthrow their continuity, and would make the point and the now, in which they are respectively divided, to be two instead of one.

necessary to observe that, whenever he expresses himself accurately, Aristotle makes a distinction between change and motion, and even considers the latter to be a species of the former. Thus, he says, change (*μεταβολή*) may take place from non-being into being, or from being into non-being, or even from being into being. The two first kinds are production and decay, but not motions; for non-being can neither be set in motion, nor motion take place towards it; moreover, all motion takes place in space, and proceeds from opposite to opposite; but non-being is not in space, and there is nothing opposite to the entity or essence. Consequently, there only remains the change from being into being, that can be regarded as motion.<sup>103</sup> Now motion is threefold; this Aristotle attempts to show from the categories, arguing that no categories but magnitude, quality, and place, admit of motion. Motion, according to magnitude, is either augmentation or diminution; that according to quality, alteration (*ἀλλοίωσις*); and that according to place, local motion (*φορά*); so that there are three motions, and four changes.<sup>104</sup> To obviate all objections to this division, Aristotle attempts to show that the change of quality differs from the other kinds of motion; for a thing may change itself without being locally moved, or augmented, or diminished; and

<sup>103</sup> Phys. v. 1. Again, in nearly the same words, Met. xi. 11, 12. In other places, generation and corruption are also classed under motion. Cat. 14 in.; Phys. iii. 1.

<sup>104</sup> Phys. iii. 1; v. 1, 2; Met. xi. 12. Occasionally, augmentation and diminution are described as two species of motion, and Aristotle makes motion to be fourfold; de An. i. 3: and even generation and corruption are made to be kinds of motion, which then has in all six species. Cat. 14. in.

a thing may move in place, and be augmented or diminished, without altering its qualities.<sup>105</sup> This argument, however, only proves that quality cannot be resolved into any relation of magnitude or place. Lastly, alteration is distinguished from the changes of production and decay by this, that the former affects none but unessential qualities of an object, whereas the latter change the essence itself.<sup>106</sup>

But Aristotle attempts to show that local motion is the primary of all the kinds of change. Augmentation rests upon alteration of qualities, since nothing is augmented without nourishment, which cannot be effected otherwise than by an alteration of the nutritive matter. But alteration is dependent on the proximity or distance of that which effects the alteration; for motion is communicated by contact alone; and proximity, or distance, only change by means of local motion. The differences of quality, too, may be reduced to condensation or rarefaction,<sup>107</sup> since heavy and light, hard and soft, hot and cold, may be resolved into dense and rare. But condensation and rarefaction are nothing else than mixture and decomposition, which are the principles of production and decay; and these, lastly, are impossible without motion in place. In the same manner may all augmentation and diminution be resolved into change in space.<sup>108</sup> This also follows from the principle, that in na-

<sup>105</sup> Cat. 14.

<sup>106</sup> Phys. v. 2; Met. xi. 12; xii. 2; de Gen. et Corr. i. 3, 4. Even ἀλλοίωσις is called a motion, κίνησις κατ' εἶδος, but this is evidently an incorrect use of the word. De Cælo, iv. 3 in.

<sup>107</sup> Phys. iii. 2; vii. 2.

<sup>108</sup> Phys. viii. 7, 9; de Gen. et Corr. ii. 9.

ture whatever is the best possible must necessarily be; but, now, motion is unceasing; consequently, continuous motion must be the best, and this can only be a motion in space, since all others proceed from a beginning to an end, or from opposite to opposite; which, however, is not necessarily the case with local motion, which may revolve in a circle.<sup>109</sup> But while it follows from this, that local motion is the earliest change according to nature or essence, it may as readily be shown to be so in time likewise. For of all changes, production is the earliest; growth, alteration, diminution, or decay, being evidently subsequent; but, now, although production itself is undoubtedly prior to local motion in the individual who is subject to production and decay, still, in general, production cannot be effected otherwise than by the exercise of the creative energy on matter, which must be preceded by local motion.<sup>110</sup> According to this it is necessary to limit, in some measure, the Aristotelian principle that whatever is prior according to essence, is posterior in time. For it is evident that, so far as regards local motion, it only admits of application to generable and perishable essences. These are ever striving to return to the eternal ground of all nature; and, consequently, it is only in the more perfect essences of this kind that an independent local motion is to be found. And if, on the other hand, there is in nature anything ingenerate and imperishable, with this, too, local motion is the first and the earliest; which,

<sup>109</sup> *Phys.* viii. 7 seq.; v. 4; vi. 10.

<sup>110</sup> *De Gen. et Corr.* ii. 9; *Phys.* viii. 7.



moreover, is, in this respect, more excellent than the other changes, that it does not necessarily entail a change of entity or of essence.<sup>111</sup>

As, then, all change has its ground in local motion, the question how the existence of an unbroken procession of changes in the world is possible, is naturally resolved by Aristotle into the further question of the possibility of a perpetual motion in space. He answers this question in the spirit of ancient ideas, but attempts to give to his solution a more rigorous and consequential form. The motion of nature, he argues, as proceeding from an enduring cause, must be uniform, continuous, and infinite. The perpetuity of motion might, indeed, be conceived of as a passage from one species into another, from alteration into destruction, and from this again into production, and into local motion or augmentation; but, in that case, motion would not be uniform, which, however, it must be, as proceeding from a constant and unvarying cause. But the motion of the world is only uniform when, in its first ground, it is local motion. Now this must either be in a right line, or a curve, or in a direction composed of both. That the last cannot be the primary, is clear, for it may be resolved into the former two, of which it is composed. Again, motion in a straight line may proceed either upwards or downwards—to the right or to the left—and backwards or forwards, for all these are the contrarieties of space. But none of these motions in a straight line could be, according to Aristotle, uniform, continuous, and infinite, since he makes the space of the world to be

<sup>111</sup> *Phys.* i. 1. ; *de Cœlo*, iv. 3.

finite. Infinite motion in a straight line is only possible on the supposition that the moved body, upon arriving at the end, returns back upon its previous direction. But, nevertheless, this motion would not be continuous, since rest would take place during the time of the turning at the end ; even the circular motion would not be continuous, if it were ever to turn upon itself, and did not continue invariable in the same direction. Consequently, it is only the circular movement, which, moving constantly in the same direction, ever returns into itself, and which unites together the beginning and end, that can be the perpetual and unbroken motion which proceeds through all time.<sup>112</sup> On this account, the world—a sphere ever moving itself in a circle—possesses a continuous, uniform, and recurring motion ; and yet, remaining constantly balanced round its centre, it is, as it were, always at rest.<sup>113</sup> As a whole, that is, it rests while its parts are locally moved, in the same manner as the parts of the world are in space, but the whole is not.<sup>114</sup>

The spherical form of the world was, in Aristotle's mind, an inference partly from the circular motion of the whole, partly from the consideration that if the world, moving in a circle, were of a different form, there must be a vacuum and space without the world, in which it might move ; which was denied by his theory ;<sup>115</sup> and partly also, from

<sup>112</sup> *Phys.* vi. 10 ; viii. 8, 9.

<sup>113</sup> *Ib.* c. 9.

<sup>114</sup> *Ib.* iv. 5.

<sup>115</sup> *De Cœlo*, ii. 4. In this proof, Aristotle admits that the circle is not the only curvilinear figure ; he instances the lenticular figure, and the ovoid.

the conception which he entertained of the perfection of the sphere. For the world, as comprising the whole, is perfect ; or rather, is only so far different from perfection itself, as it is material ;<sup>116</sup> and, as perfect, it is that beyond which nothing can be taken. This property, however, does not belong either to right lines or to rectilinear figures, since they can always receive accessions, but it is the peculiar property of the circle and the sphere.<sup>117</sup> Now according to this well-known conception, Aristotle divides the world into that which is at the circumference, and the parts which lie about the centre of the mundane sphere. The latter is earth, the former heaven, and partakes of the perfect revolution of the circle, that prime motion from which all other motion proceeds ; heaven is nearer to the prime moving cause, where the ancients, guided by the correct tradition of a lost wisdom, placed the dwelling of the gods ; it is the more deserving of honour and worship the more it is removed from those imperfect things among which man's destiny is cast. The earth, on the contrary, is given over to imperfection ; it is far removed from the prime mover, and, consequently, has but a small share of the godlike and divine.<sup>118</sup>

<sup>116</sup> Ib. i. 1. ὥστ' ἐπεὶ τὰ πάντα καὶ τὸ πᾶν καὶ τὸ τέλειον οὐ κατὰ τὴν ἰδίαν διαφέρουσιν ἀλλήλων, ἀλλ' εἴπερ ἄρα ἐν τῇ ὕλῃ καὶ ἐφ' ὧν λίγονται.

<sup>117</sup> Ib. ii. 4. Aristotle adduces other arguments, but of a less general character and importance.

<sup>118</sup> De Cælo, i. 2. διόπερ ἐξ ἀπάντων ἂν τις τούτων συλλογιζόμενος πιστεύσειεν, ὥς ἐστι τι παρὰ τὰ σώματα τὰ δεῦρο καὶ περὶ ἡμᾶς ἕτερον κειωρισμένον, τοσούτῃ τιμιωτέραν ἔχον τὴν φύσιν, ὅσῳ περ ἀφίστηκε τῶν ἐνταῦθα πλείον. Ib. ii. 1 ; Met. xii. 8. παραδίδοται δὲ παρὰ τῶν ἀρχαίων καὶ παμπалаίων ἐν μύθου σχήματι καταλειμμένα τοῖς ὑστερον, ὅτι θεοὶ τί εἰσιν οὗτοι καὶ περιέχει τὸ θεῖον τὴν ὅλην φύσιν. He then mentions those

In respect to the former portion, the world may rightly be termed perfect, incapable of old age, and eternal;<sup>119</sup> but, in reference to the latter, these high attributes cannot be ascribed to it, for, on the contrary, it is here exposed to a perpetual alternation of youth and age.<sup>120</sup>

In establishing this opposition between the two parts of the world, Aristotle evidently followed no general idea, but was guided chiefly by what observation taught of the part nearest to man. It is true that the distinction naturally follows from the conception of the world's circular motion, which requires a central point which is at rest; nevertheless, the view that the earth forms this centre, which is thereby extended to a body, and that the heaven is separate from earth, and that in heaven, as a divine entity, nothing rests, but motion is eternal, is manifestly not a consequence from the general principles of his physiology. The presence of matter in the world does not, according to Aristotle, necessitate a discontinuous change, perpetually alternating between production and decay, for he expressly says, that although a particular object be material, it is not, therefore, necessarily, exposed to generation and corruption.<sup>121</sup> It was, therefore, the observation of

mythical additions, designed for the vulgar, and by usage acknowledged as laws. ὥν εἰ τις χωρίσας αὐτὸ λάβοι μόνον τὸ πρῶτον, ὅτι θεοὺς φωντο τὰς πρῶτας οὐσίας εἶναι, θείως ἂν εἰρῆσθαι νομίσειε καὶ κατὰ τὸ εἶδος πολυλάκις εὐρημένης εἰς τὸ δυνατόν ἐκάστης καὶ τέχνης καὶ φιλοσοφίας καὶ πάντων φθιρομένων καὶ ταύτας τὰς δόξας ἐκείνων οἷον λείψανα περισεῶσθαι μέχρι τοῦ νῦν. Cf. de Cælo, i. 3; Meteor. i. 3.

<sup>119</sup> De Cælo, i. 9.

<sup>120</sup> Meteorol. i. 14; Met. iv. 5; de Part. An. i. 1.

<sup>121</sup> Met. viii. 1 fin.; 4; xii. 2.

a fluctuating and irregular change, that influenced Aristotle to place that portion of the world which pertains to the terrestrial sphere, in such direct opposition to the heaven with its orderly movement. This he himself describes as the course of his investigations on this subject. Setting out from the observation of objects which alternate between motion and rest, he arrived at the conviction that there must be a mover which can be either moved or not moved. But, in order that there may be such an eternal and continuous motion as experience shows to belong to the heavenly bodies,<sup>122</sup> there must also be an unmoved mover, since it is only the unchangeable that can occasion constant and uniform motion; and conversely, in order that a changeable motion, like that of generation and corruption, should be possible, there must be an intermediate nature, which sets in movement, but, at the same time, is itself moving and changing, and so can work differently at different times.<sup>123</sup> Consequently, to a right exposition of nature, it is necessary to suppose three different entities—one, out of matter, and unmoved, which is God; two in matter,—the eternal and imperishable heaven, which moves locally only, and with a constant uniformity in a circle—and the perishable essence within the domain of earth.

But as, according to Aristotle, the centre of the earth is dependent on the circumference, in the detailed exposition of his physiology he naturally explains, first of all, his theory of the heaven, to which he attaches the doctrine of the universe as

<sup>122</sup> Met. xii. 8.

<sup>123</sup> Phys. viii. 6.

a whole; and treats, in the last place, of the terrestrial region, commencing with the investigation into the nature of corporeal existence, and concluding with the treatise on the soul. This body of research is remarkable for the two contrary directions which Aristotle successively adopts. In the first part, he sets out from the more perfect, and proceeds gradually to the more and more imperfect. In this descending progress Aristotle continues as long as he is treating of the superior mundane forces, but when he arrives at the consideration of terrestrial beings, he assumes a contrary course, and proceeds from the less to the more perfect. It is hard to say whether Aristotle was conscious of the reason of this method; but it is plainly in accordance with his view, that in supramundane regions the more perfect, and the beginning according to entity, is also the beginning to time, whereas in the terrestrial it is necessary to begin with the imperfect and the subsequent according to essence, in order to conclude with the more perfect and the earlier.

In the treatise on heaven,<sup>124</sup> Aristotle admits, more distinctly than in any other parts of his physical theory, the limits and inadequacy of human knowledge. When he treats of the different entities and spheres of heaven, he admits that it is necessary to leave it to stronger intellects to furnish the requisite information on this head; <sup>125</sup> our knowledge of uncreated and imperishable beings is ex-

<sup>124</sup> Aristotle employs the term 'heaven' in a variety of senses: at times it indicates the whole world; at times, that part only in which the stars are; and lastly, simply the sphere of the fixed stars.

<sup>125</sup> Met. xii. 8.

tremely limited, since our senses furnish us with little information concerning them; but that this little is the more attractive to speculation, as its object is the divine, and, of all things, the most worthy of honour and worship.<sup>126</sup> But even in this inadequate state of our knowledge of the heavenly region, Aristotle does not hesitate to assign to it all good and all perfection; for this opinion does not owe its origin to experience, notwithstanding that it appears to be, in some measure, confirmed by it, since we see that in heaven there is a never-ending and unvarying series of motion.<sup>127</sup> But, even where he was altogether abandoned by experience, Aristotle did not hesitate to pursue his view of the excellence of the heavenly region. Of the stars, he teaches that they are passionless beings, who have attained to the highest end of existence; <sup>128</sup> it admits not of doubt that they are more divine than man,<sup>129</sup> which of course implies that the heaven has a soul, and possesses in itself the principle of its motion.<sup>130</sup> Moreover, its movement, unlike that of less perfect creatures, does not require repose; for, being performed without exertion, it occasions no fatigue. For the nature of the heavenly and sidereal motion is different from that of terrestrial beings. The latter proceeds from oppo-

<sup>126</sup> De Part. An. i. 5; de Cælo, ii. 3, 12.

<sup>127</sup> De Cælo, i. 3; Met. xii. 8.

<sup>128</sup> Met. i. l. *ἔτι δὲ πᾶσαν φύσιν καὶ πᾶσαν οὐσίαν ἀπαθῇ καὶ καθ' αὐτὴν τοῦ ἀρίστου τετυχηκυῖαν τέλους δεῖ νομίζειν.* De Cælo, ii. 1. *ἀπαθὲς πάσης θνητῆς δυσχερείας.*

<sup>129</sup> Eth. Nic. vi. 7. *καὶ γὰρ ἀνθρώπου ἄλλα πολὺ θεώτερα τὴν φύσιν, ὅλον φανερώτατά γε, ἐξ ὧν ὁ κόσμος συνίστηκεν.*

<sup>130</sup> De Cælo, ii. 2. *ὁ δ' οὐρανὸς ἔμψυχος καὶ ἔχει κινήσεως ἀρχήν.* Cf. ib. c. 3, 12.

site to opposite, and passes from potentiality into actuality; while, on the contrary, in the circular motion of the heavens there are no opposites, and all is ever actual.<sup>131</sup> As a further consequence of the excellence of the heavenly region, its motion proceeds from left to right. For, according to Aristotle, it is not only for individuals that these relations have a natural import, but also for the whole universe, since it also is a living entity, and possesses a principle of movement. But since motion proceeds from the right, the reason is evident why man does not inhabit, in reference to heaven, the upper and not the lower region of the world.<sup>132</sup>

It is not our intention to investigate at length the astronomical principles which Aristotle employs to construct the heavens. Confining ourselves to those points which directly influenced his general view of the universe, it is sufficient to notice that Aristotle divides the heaven into two parts, the highest circle of the world, or the heavenly sphere, in a narrower sense—the region of the fixed stars, and the lower circle or sphere of the planets, among which, beside the five known to the ancients, he reckons the sun and the moon. The heaven of the fixed stars receives its motion directly from the prime moving cause; it moves from right to right; to it the greatest perfection of all the world belongs, far surpassing the lot of the planets, as more

<sup>131</sup> Met. ix. 8; de Cœlo, ii. 1. But Aristotle admits of opposites, even in circular motion, de Cœlo, i. 8; and although the heaven is not wholly without matter, it nevertheless possesses a faculty out of which activity originates.

<sup>132</sup> De Cœlo, ii. 2, 5. Aristotle concludes that the heavenly motion is from left to right, simply because it is the better. This is evidently a paralogism.



remote from the perfect primary.<sup>133</sup> The planets, moreover, move in contrary directions, and in oblique orbits, in consequence of their spheres possessing a proper motion, and being, at the same time, influenced by that of the fixed stars. On this account, the planet nearest to the latter sphere moves more slowly than the most remote.<sup>134</sup> Lastly, the earth is in the centre of the universe; being of a spherical form, like the stars, because the terrestrial tends naturally to the centre of the world, and arranges itself uniformly around it.<sup>135</sup>

In order to understand the apparently philosophical grounds which Aristotle adduces in support of the principal points of his system of the universe, it will be necessary to examine, in the first place, his doctrine of the elements. These Aristotle considers to be, in general, simple bodies. Their base is matter, which always involves contraries, out of which the elements draw their origin.<sup>136</sup> According to the nature of all that is material on the earth, they are not permanent, but are constantly passing into each other.<sup>137</sup> This, of course, implies that the opposite qualities of simple bodies cannot be resolved into mathematical figure. The contrary opinion is ridiculed by Aristotle, who justly remarks that, according to it, there must be the same opposition between figures as between warm and cold, that the mathematical figures ought

<sup>133</sup> De Cælo, ii. 12.<sup>134</sup> Ib. c. 10.<sup>135</sup> Ib. c. 14.<sup>136</sup> De Gen. et Corr. ii. 1. ὥστε πρῶτον μὲν τὸ δυνάμει σῶμα αἰσθητὸν ἀρχή, δεύτερον δὲ αἱ ἐναντιώσεις· λέγω δ' οἷον θερμότης καὶ ψυχρότης· τρίτον δὲ ἤδη πῦρ καὶ ὕδωρ καὶ τὰ τοιαῦτα.<sup>137</sup> De Cælo, iii. 6; de Gen. et Corr. ii. 4.

to burn and to give out heat, and that a pyramid and a circle must produce pyramids and circles, as fire does fire—which, in short, would be the same as to assert that a sabre must make a sabre, or a saw a saw.<sup>138</sup> An opinion somewhat similar is that which derives all physical differences from a single element, by means of its varying condensation or dilatation; for, according to this view, fire is condensed air, and the nature of everything would consist in nothing else than a difference of proportion; and, if fire be the rarest element, then would air be fire as compared with water. It is clear, therefore, there is more than a single element; their multiplicity is necessary from the contrarieties of nature, which do not admit of being determined simply by degree, as well as from the difference of the natural motions of the world, which is a fundamental doctrine of Aristotle's physics.<sup>139</sup> But, on the other hand, an infinite number of elements is equally impossible. To this conclusion Aristotle would naturally enough be led by his objection to infinity in general, but it seems also to have followed from the consideration that there is a determinate number of qualities and also of natural motions.<sup>140</sup> It remains, therefore, to assume that the elements are many, but determinate in number. His reasons for assuming four or five simple elements are involved in the objections which he advances against the preceding opinions: on the one hand, the consideration of the contrarieties of sensible qualities; on the other, that of the contrarie-

<sup>138</sup> De Cælo, iii. 8.<sup>139</sup> De Cælo, iii. 5.<sup>140</sup> Ib. c. 4.

ties of natural motion; these, together, are the principles of the difference of the elements. Now as every body is tangible, the contrarieties of sensible or corporeal qualities may be ultimately resolved into those of touch, which are the warm and the cold, the dry and the moist. But as opposite cannot be united with opposite, there can only be four combinations of these contraries, and, therefore, four elements; the warm and the dry constituting fire, the warm and the moist the air, the moist and the cold the water, and, lastly, the cold and the dry constituting earth.<sup>141</sup> Nevertheless, Aristotle usually gives another and a more complete derivation of the elements from the difference of the motions of the world. The spherical shape of the world naturally gives rise to the twofold distinction of the centre and the circumference; what lies about the centre is naturally the lower, the circumference the naturally higher. This determination occasions three principal directions of motion; around the centre, from the higher to the lower region, and conversely. As, now, the natural mo-

<sup>141</sup> De Gen. et Corr. ii. 2, 3; Met. iv. 1, where the qualities are called αἰτία τῶν στοιχείων; and also ἀρχαί, like the elements, de Part. An. ii. 2; de Gen. et Corr. ii. 1. The tangible is made the basis on the ground that touch is the chief sense, as will be seen afterwards. The moist of Aristotle is properly the fluid, as his dry is the solid. De Gen. et Corr. ii. 2. ὑγρὸν δὲ τὸ ἀόριστον οἰκείῳ ὕρῳ, εὐόριστον δὲ ξηρὸν δὲ τὸ εὐόριστον μὲν οἰκείῳ ὕρῳ, ἀόριστον δέ. Compare de Part. An. ii. 2 in. According to this representation the cold is not merely the privation of warmth. De Part. An. ii. 2. τὸ ψυχρὸν φύσις τις, ἀλλ' οὐ στέρησις ἐστίν, ἐν ὅσοις τὸ ὑποκείμενον κατὰ πάθος θερμὸν ἐστί. And still it is explained as such. De Cælo, ii. 3. καὶ τῆς στερήσεως πρότερον ἢ κατάφασις· λέγω δ' ὅλον τὸ θερμὸν τοῦ ψυχροῦ. Inconsistently with the above, warmth and cold are resolved into rarefaction and condensation, Phys. viii, 7, as indeed, generally, the distinction of the elements is made to consist in their respective degrees of rarity or density.

tion is antecedent to mechanical or forced motion, these three directions must have been earlier followed in the former than in the latter, and there must consequently be certain bodies which, of their proper nature, severally pursue them.<sup>142</sup> As, now, none of the simple bodies which are observed on the earth move naturally in a circle, Aristotle assumes the existence of a fifth element, which is anterior to and more divine than the other, in the same degree that the motion in a circle is prior to and more excellent than that in a straight line. This element, in conformity with ancient statements, he calls ether. It is neither heavy nor light, since it neither tends downwards to the centre nor upwards to the circumference. It is not subject to any of the imperfections to which the other elements are liable; it is without passion, because there is nought opposite to it, in the circular motion, which is proper to it; consequently, it has only local motion, and is without increase or decrease, production or decay. Of it the heaven and the stars are composed; like them it is eternal, as is proved by the tenor of all tradition, which is silent as to any change of the heavens.<sup>143</sup> If this were the only element, there would be neither generation nor corruption, but an eternal motion. But the centre of the mundane sphere must necessarily rest; and there must consequently be a body, which tends naturally to the centre, for at the point to which bodies tend naturally, they must naturally have their rest. Such a body is earth.

<sup>142</sup> De Cælo, i. 2.

<sup>143</sup> L. i.; ib. c. 3; ii. 7; Met. i. 3.

But the existence of one member of a system of contraries necessitates its contrary; and, as fire is the opposite of earth, the necessity of fire follows from the existence of earth. Earth is that which by nature tends downwards, while the natural motion of fire is from a lower to a higher region; the latter floats above all the other elements, the former serves, as it were, for a basis to them. But this being so, there must necessarily be two more, one of which may float above the one of the former two, and the other serve as a foundation to the other.<sup>144</sup> These two intermediate elements, water and air, have each its proper locality; the water is above the earth and under the air, the air above the water, but under the fire; and towards these, their proper sites, their natural motion tends directly. All the four pass easily into one another, because, being opposed to each, they have a reciprocal action and passion. These two different derivations of the elements are but imperfectly identified by Aristotle in the following manner. Of the two contrarieties which are involved in sensuous perception, one is active and the other passive. Warm and cold are active, and occasion a passion in the opposite; moist and dry, on the contrary, are passive, for the moist is that which has an indeterminate but easily determinable limit, but the dry a determinate but not easily determinable; consequently, fire and air are active, because they are warm, but water and air because they are

<sup>144</sup> De Cœlo, iv. 5. *ἔπει δ' ἔστιν ἐν μόνον, ὃ πᾶσιν ἐπιπολάζει, καὶ ἓν, ὃ πᾶσιν ὑφίσταται, ἀνάγκη δύο ἄλλα εἶναι, ἃ καὶ ὑφίσταται τι καὶ ἐπιπολάζει τινί.*

cold; and, in like manner, fire and earth are passive, as dry, and air and water as moist; and, lastly, all the elements are mutually active and passive.<sup>145</sup> On this account they are subject to production and decay, change, increase and decrease. Moreover, they are light and heavy. Earth is everywhere heavy, by reason of its tending downwards, while fire, as tending upwards, is everywhere light; but the other two are light or heavy according to the place in which they are, since they may either tend upwards or downwards at different times.<sup>146</sup>

Having given the details of this doctrine, we shall now proceed to examine their mutual connection and dependence. The whole of it depends upon the view, that the world is a self-moving sphere. Here, the circular motion of the ether is primarily necessarily; and therefore, the earth, which reposes at the centre, necessarily separated itself, in order that the heaven and the ether might move constantly and regularly. But, if earth be necessary, fire must be so equally; and, if fire and earth exist, there must also be the two intermediate elements. Their reciprocal action and reaction are the causes of generation and corruption; and, especially, of that inconstant and irregular kind of becoming, which is observed among terrestrial things. Lastly, from the perishable nature of earthly things it results that there must be several bodies in the heaven; and, that not only the circular motion of the fixed stars, but also the oblique orbits of the planets, which occasion the irregu-

<sup>145</sup> Met. iv. 1, 5.

<sup>146</sup> De Cælo, iv. 4.

larity of terrestrial motion are necessary.<sup>147</sup> Thus, then, according to Aristotle, the structure of the universe is held together by a necessary bond which gives strength and solidity, however artificial, to the several members of the system. Aristotle, indeed, herein, with all gravity, plays a game in which the union of experience, however imperfect, with a few abstract necessary ideas, favours every species of trick and delusion; of which, however, the contemplation is far from being without charms for us, who are too far removed from the infancy of physics, to be deceived by the fraud.

In the greater mundane masses, all assumes a circular form. It is thus that the sphere of the fixed stars, and those of the planets, and the earth, are fashioned; and even the water surrounds the earth in a circle, wherever, at least, no impediment exists; and, in this way, the circumference of the sea is formed. Next to the watery sphere follows that of the air; and, after the air, fire; consequently, they, too, must be fashioned into a circular form, since, otherwise, their relation to the sphere of the water, and to

<sup>147</sup> De Caelo, ii. 3. νῦν δὲ τοιοῦτόν ἐστι δῆλον, διὰ τίνα αἰτίαν πλείω τὰ ἐγκύκλια ἐστί σώματα, ὅτι ἀνάγκη γίνεσθαι εἶναι· γίνεσθαι δέ, εἴπερ καὶ πῦρ· τοῦτο δὲ καὶ τᾶλλα, εἴπερ τὰ γῆν· ταύτην δ' ὅτι ἀνάγκη μένειν τι αἰεὶ, εἴπερ κινεῖσθαι τι αἰεὶ. De Gen. et Corr. ii. 10. ἐπεὶ δ' ὑπόκειται καὶ δίδεικται συνεχῆς οὖσα τοῖς πράγμασι γένεσις καὶ φθορά, φαμέν δὲ αἰτίαν εἶναι τὴν φορᾶν τοῦ γίνεσθαι, φανερόν ὅτι μιᾶς ἥν οὖσης τῆς φορᾶς οὐκ ἐνδέχεται γίνεσθαι ἄμφω διὰ τὸ ἐναντία εἶναι. τὸ γὰρ αὐτὸ καὶ ὡσαύτως ἔχον αἰεὶ τὸ αὐτὸ πέφυκε ποιεῖν ὥστε ἥτοι γένεσις ἔσται αἰεὶ ἢ φθορά. δεῖ δὲ πλείους εἶναι τὰς κινήσεις καὶ ἐναντίας ἢ τῇ φορᾷ ἢ τῇ ἀνωμαλίᾳ· τῶν γὰρ ἐναντίων αἰτία τὰναντία· διὸ καὶ οὐκ ἡ πρώτη φορὰ αἰτία ἐστὶ γενέσεως καὶ φθορᾶς, ἀλλ' ἡ κατὰ τὸν λοξὸν κύκλον· ἐν ταύτῃ γὰρ καὶ τὸ συνεχὲς ἐστὶ καὶ τὸ κινεῖσθαι δύο κινήσεις.

each other, would vary.<sup>148</sup> Generally, however, nothing is found pure in these regions; and, consequently, the fire and air around the earth are not simply fire and water;<sup>149</sup> but, in the variable becoming of earth, many impure mixtures are formed, and, by this fact, many aerial phenomena may be explained. Similarly, the sea is not pure water, as is clear from its bitter and salt taste; it is not the beginning, so much as the end of water; and it is compared by Aristotle with animal secretions.<sup>150</sup> From this we learn, that Aristotle considers the earth also a living being; which results still more clearly from the fact, that he derives the recession of the sea and its encroachment on the continent from a change, which takes place in the interior of the earth, by which, like plants and animals, it passes from youth to age. This, however, does not affect the whole earth simultaneously, but only its different parts, which are severally old and young.<sup>151</sup> Aristotle evidently looked upon all nature as endued with life; since, even the simple bodies, and the apparently lifeless elements, are regarded by him merely as organical parts of the earth. Thus he ascribes vitality, generation, and corruption to the air; which, assuredly were not independent of the life of the whole world.<sup>152</sup> In the world, indeed, all is held together; for the

<sup>148</sup> De Cælo, ii. 4; Meteor. ii. 2.

<sup>149</sup> Meteor. i. 3. By fire Aristotle does not mean what is usually understood thereby: for this is not fire, but rather an excess of it; and is, as it were, a sort of boiling heat. De Cælo, ii. 7.

<sup>150</sup> Ib. ii. 2.

<sup>151</sup> Ib. i. 14. ἀρχὴ δὲ τούτων καὶ αἰτίων, ὅτι καὶ τῆς γῆς τὰ ἐντός, ὥσπερ τὰ σώματα τὰ τῶν φυτῶν καὶ ζώων, ἀκμὴν ἔχει καὶ γῆρας, κ. τ. λ.

<sup>152</sup> De Gen. An. iv. 10.



lower, and less good, is ever dependent on the higher, and more excellent. Thus the terrestrial sphere is ruled by the superior spheres of the stars; the sea, by the winds which belong to the aerial sphere; and these are dependent upon the revolutions of the sun and moon. But, as the earth is dependent on all the other, it is naturally the least regular and accurate in its motions; since, so many agents exert upon it an evervarying influence.<sup>153</sup> According to this view, each superior sphere is a moving cause of the inferior; which is, as it were, an organ of the former; all, however, is moved with order and regularity, except in the regions beneath the moon, which are the seat of irregular motion. Connected, moreover, herewith, is the view, that each inferior sphere stands in the same relation to the superior, as matter does to form; for the moving cause is even the form, and what is moved is matter.<sup>154</sup> We have the same thought, but not without some accessories, in the statement, that every higher sphere embraces that immediately under it; and, as the conception of the more or less perfect was, with Aristotle, equivalent with that of the more or less material, he naturally formed the opinion that the higher spheres, as the lighter, are less material and more perfect than the lower; which, again, are heavier and more material than the higher.<sup>155</sup>

<sup>153</sup> L. 1.; Meteor. i. 2.

<sup>154</sup> De Cælo, iv. 3. τὸ δ' εἰς τὸν αὐτοῦ τόπον φέρεσθαι ἕκαστον τὸ εἰς τὸ αὐτοῦ εἶδος ἐστὶ φέρεσθαι. — ἀεὶ γὰρ τὸ ἀνώτερον πρὸς τὸ ὑφ' αὐτὸ ὡς εἶδος πρὸς ὕλην οὕτως ἔχει πρὸς ἄλλα.

<sup>155</sup> Ib. c. 4; Phys. iv. 5; Meteor. iv. 1. All of the other elements are, as it were, the material of fire, which constitutes the limit of the others. De Gen. et Corr. ii. 8. μόνον γὰρ ἐστὶ καὶ μάλιστα τοῦ εἶδους τὸ πῦρ, διὰ τὸ πεφυ-

Nevertheless, we must admit that these views are inconsistent with the general principle of Aristotle's theory; for they reduce the difference of form and matter into one of degree simply.

Besides these investigations into the larger bodies of nature, the physics of Aristotle contain a more precise dissertation upon those terrestrial objects, which do not constitute a part of elementary existence. In the latter, he proceeds, as already mentioned, from the less to the more perfect; and it is plain, that the latter pre-eminently attracts his attention. For, on the one hand, whatever belongs to all, or to most parts of the earth, is considered chiefly, if not solely, in its relation to the superior spheres;<sup>156</sup> and, on the other, he passes over without notice the unorganical; and even if he has assigned a special treatise to plants, they, nevertheless, hold a very subordinate rank among his philosophical researches into nature. Lastly, Aristotle's doctrine of terrestrial creatures finds its central point in the male man; compared with whom, all else is either stunted or deformed.

In his theory of living things, he opposes them to elementary bodies. The latter are simple, the former composite, and not merely an aggregation, but a proper combination of the elements.<sup>157</sup> This composite body is formed of the union of several simple bodies; which, possessing like force, form themselves into a compound body, homogeneous

κίναί φέρεσθαι πρὸς τὸν ὕδρον. — ἡ δὲ μορφή καὶ τὸ εἶδος πάντων ἐν τοῖς ὕδρσι.

<sup>156</sup> When, for instance, he speaks of the blood, or what is analogous to it.

<sup>157</sup> De Gen. et Corr. i. 10. φαμέν δέ, εἴπερ δεῖ μεμῆχθαι τι, τὸ μυχθὲν ὁμοιομερές εἶναι.

in all its parts, and possessing all the different qualities of its simpler constituents, of which the virtues are united in the compound.<sup>158</sup> From such a union, the homogeneous parts of a composite body, such as the bones and flesh, are formed; the combination of hot and cold, moist and dry, producing a mean result.<sup>159</sup> Carrying out this view, Aristotle proceeds to show, that all living beings must be composed of all four elements. For, as they live upon earth, they must contain earth; water, in the next place, must hold earth together; accordingly, it constitutes that part of the living body, which is most easily limited; and these two constitute the matter of the living thing. But, if water and earth are contained in it, their contraries, fire and air, must, of necessity, be so.<sup>160</sup> From the concurrence of the elements, arise the homogeneous parts of the living body; and, from the combination of the latter, the heterogeneous; it is thus that the hand and the face are formed of bone and flesh. According to this genesis, the homogeneous is, according to production, subsequent to the elementary; and, again, the heterogeneous to the homogeneous; nevertheless, according to the law, that the less good is prior to the better, the converse order must hold among these things in reference to the essence and the end.<sup>161</sup> Life, therefore, is the end of the elementary, while the homo-

<sup>158</sup> L. l.

<sup>159</sup> Ib. ii. 7, fin. ἐκ δὲ τούτων (sc. τῶν στοιχείων) σάρκες καὶ ὅσα καὶ τὰ τοιαῦτα τοῦ μὲν θερμοῦ γιγνομένου ψυχροῦ, τοῦ δὲ ψυχροῦ θερμοῦ, ὅταν πρὸς τὸ μέσον ἔλθῃ, κ. τ. λ.

<sup>160</sup> De Gen. et Corr. ii. 8; Meteor. iv. 4.

<sup>161</sup> De Part. An. ii. l.

geneous parts of the living frame serve, as it were, but as means to the end, in order to form the proper organs both of sensation and of action. How, in this view, all is subservient to the ultimate object of making the life-giving soul the end of nature, is obviously manifest.

This progressive advancement of nature, from the lower to the higher, is also traceable in the different degrees of animated life. According to Aristotle, there is a continuous progression in nature, from the element to the plant, from this to the animal, and, finally, to man. Even the elements are, in a certain sense, animated, for the life of the universe pervades all things.<sup>162</sup> The transition from vegetable to animal is almost imperceptible, being formed by the zoophytes; and, in the animal races, we may trace indistinctly, whatever, in a more eminent degree of perfection, belongs to man.<sup>163</sup> For, in mental powers, children are scarcely superior to some animals. Plants are intermediate, between the inanimate and the animate; they are not animals (*ζῶα*), only animated beings (*ζῶντα*);<sup>164</sup> although, when compared with animals, they appear to be inanimate.<sup>165</sup> Aristotle could not deny the life of plants, after making life to consist in nothing else than spontaneous nutrition, growth, and decay;<sup>166</sup> nor even a soul, since

<sup>162</sup> De Gen. Anim. iii. 11.

<sup>163</sup> Hist. An. viii. 1; de Part. An. iv. 5. ἡ γὰρ φύσις μεταβαίνει συνεχῶς ἀπὸ τῶν ἀψύχων εἰς τὰ ζῶα διὰ τῶν ζώντων μὲν, οὐκ ὄντων δὲ ζώων, ὅπως ὥστε δοκεῖν πάνπαν μικρὸν διαφέρειν θάτερον θάτερον τῷ σύνεγγυς ἀλλήλοις.

<sup>164</sup> De Part. An. ii. 10; iv. 5; de An. ii. 2.

<sup>165</sup> Hist. An. i. 1.

<sup>166</sup> De An. ii. 1. ζωὴν δὲ λέγομεν τὴν δι' αὐτοῦ τροφήν τε καὶ ἀτξῆσιν καὶ φθίσιν.

a soul is the entelechy, or form, of a physical, organical, and living body.<sup>167</sup> Nevertheless, they only possess life in the lowest degree; viz. the nutritive (*θρεπτικόν*), of which the natural propagation belongs. The only functions of plants are self-nutrition and the propagation of their kind.<sup>168</sup> They are evidently incapable of local motion, and are also without sensation, notwithstanding that they suffer from touch, and from heat and cold; for they are without any central seat of life, and possess no internal principle, capable of receiving the forms of the sensible.<sup>169</sup> One cause of the great superiority of animals to plants, consists in this, that the former constitute, as nearly as possible, a single nature and a single soul, whereas the latter resemble an aggregate of animals, as is evident from the observed fact, that, even when divided, all the several parts retain life. Actually, indeed, they possess only one life, but, potentially, they enjoy several,<sup>170</sup> and have no indivisible centre of vitality. The imperfection of plants further follows from

<sup>167</sup> L. i. εἶδος σώματος φυσικοῦ δυνάμει ζωὴν ἔχοντος. — διὸ ψυχὴ ἴσ-  
τιν ἐντελέχεια ἢ πρώτη σώματος φυσικοῦ δυνάμει ζωὴν ἔχοντος. τοιοῦτο  
δὲ ὃ ἂν ᾖ ὄργανικόν. ὄργανα δὲ καὶ τὰ τῶν φυτῶν μέρη. The only differ-  
ence between the ensouled and the soulless, is life. Ib. c. 2.

<sup>168</sup> De An. ii. 2, 4; de Gen. An. i. 23.

<sup>169</sup> De An. ii. 12. καὶ διὰ τί ποτε τὰ φυτὰ οὐκ αἰσθάνεται ἔχοντά τι μόριον  
ψυχικόν καὶ πάσχοντά τι ὑπὸ τῶν ἀπτῶν· καὶ γὰρ ψύχεται καὶ θερμαίνεται.  
αἴτιον γὰρ τὸ μὴ ἔχειν μεσότητά μηδὲ τοιαύτην ἀρχὴν οἷαν τὰ εἶδη δεῖσθαι,  
ἀλλὰ πάσχειν μετὰ τῆς ὕλης.

<sup>170</sup> De An. ii. 2; de Juv. et Sen. 2. ἰοίκασι γὰρ τὰ τοιαῦτα τῶν ζώων πολ-  
λοῖς ζώοις συμπεφυκόσιν. τὰ δ' ἄριστα συνεστηκότα τοῦτ' οὐκ ἴσχει τῶν  
ζώων διὰ τὸ εἶναι τὴν φύσιν αὐτῶν ὡς ἐνδέχεται μάλιστα μίαν. De Resp.  
17. In this respect, plants resemble certain insects, which are treated of in the  
above passage. Consequently, the non-sensibility of plants is not universally  
true.

their belonging to the lowest of the elements, earth.<sup>171</sup> For they are firmly rooted in the earth, and draw from it their nourishment; the roots serving as a mouth or organ, for the reception of food. Wherever this organ is properly found, it is in the upper part of the living creature; consequently, this is a further proof of the inferiority of plants, for what by nature is superior, is in them inferior.<sup>172</sup>

We cannot enter into all the specifications of this doctrine of the several classes of living beings; nevertheless, it will tend to its elucidation, to notice its principal point—the standard by which their respective degrees of perfection are determined. We have already remarked that, according to Aristotle, every living creature must be composed of all the four elements; but we must here observe, that he seems to have supposed that a fifth element—that of the stars—enters into every organisation of life. For every animal, in order to subsist, requires warmth,<sup>173</sup> which is necessary for its sustenance, and belongs even to plants. This vital heat, however, is not to be confounded with fire; since fire does not vivify, and it is only the animal heat and the sun that can produce life;<sup>174</sup> consequently, the seat of this vital heat must be the ether.<sup>175</sup> In every animal, therefore,

<sup>171</sup> De Gen. An. iii. 11; de Resp. 13.

<sup>172</sup> De An. ii. 4; de Juv. et Sen. 1; de Inc. An. 4.

<sup>173</sup> De An. ii. 4; de Part. An. ii. 3.

<sup>174</sup> The so-called *generatio equivoca*, τὸ ὡς περ αὐτοματίζειν τὴν φύσιν, is not doubted by Aristotle. De Gen. An. i. 1.

<sup>175</sup> De Gen. An. ii. 3; de An. ii. 4, fin. occurs ἐμψυχος θερμότης, de Gen. An. iii. 11, also θερμότης ψυχική. We must not suffer ourselves to be misled

there is a combination of five elements, but in different ratios; so that, in some, the lower elements, in others, the higher, preponderate; and the former constitute the inferior, but the latter, the nobler races. Aristotle expressly asserts, that the more vital heat an animal possesses, the more excellent is its soul.<sup>176</sup> Plants and aquatic animals, and especially those which fix themselves to the earth, as it were, by a root, are the worst, while the terrestrial are the more excellent; since the former are composed principally of earth, but the latter of air and fire.<sup>177</sup> In the account of the difference between plants and animals, the greater perfection of the latter was made to consist in their being ruled by a single principle of life, not merely actually, but also potentially, so that the multiplication of the living essence cannot be produced by a mere division. This also holds of those animals which live, even when separated into parts. And, on the other hand, nature is impeded in the pursuit of her end, when, as it were, out of several germs of life, a single life is produced.<sup>178</sup> Connected with this view is the classification of animals according to the mode of their propagation. Some animals are produced

by such expressions, and ascribe to Aristotle a disposition to make the ethereal warmth to be the soul. For warmth is merely the instrument of the soul. *De Gen. An.* ii. 4; *de Part. An.* ii. 3, 7. *τούτου δ' αἵτιον ὅτι τοῖς τῆς ψυχῆς ἔργοις ὑπηρετικώτατον τῶν σωμάτων τὸ θερμὸν ἐστίν.*

<sup>176</sup> *De Resp.* 13.

<sup>177</sup> *De Resp.* 13; *de Gen. An.* iii. 11. In the last passage, fire-animals are also mentioned, as belonging to the moon. But, in such matter, Aristotle's manner is very loose. Thus the preponderance of a particular element figures strangely in his theory of mixture; according to which, a drop of wine in a larger quantity of water is changed into water. *De Gen. et Corr.* i. 10.

<sup>178</sup> *De Part. An.* iv. 5, 6.

out of a seed ; others, on the other hand, by a peculiar agency of nature, issue out of the putrified earth ; and these are less perfect than the former, as is, indeed, evinced by their inferior warmth.<sup>179</sup> Moreover, it is good that the better should be, as far as possible, separated from the worse ; and, on this account, in the more perfect animals, the male and the female are kept separate in distinct creatures ; and their propagation is effected by the union of two of the same kind. This classification, however, comprises a great variety of gradual differences. The warmer and more perfect animals produce young, which are perfect in their conformation, and only change by increasing in size. The propagation is less perfect when the young is endued with life, but imperfect in its formation. And, in the next class, those animals follow, which produce perfect eggs ; then, those whose eggs are at first imperfect ; lastly, other animals of the lowest degree of warmth, are propagated by worms, which, in a second stage, change into the chrysalis state, and only attain to perfection in a third transmutation.<sup>180</sup> When treating of plants, we saw that Aristotle ascribed it to some imperfection in the nature of a living creature, when the part, which is naturally superior, is not the higher in position also.<sup>181</sup> Consequently, those animals, whose most essential organ is in the centre of their bodies, and not at the highest part, are less perfect than those who have it in their superior parts ; and, on this account, man is erect, because his nature and

<sup>179</sup> De Gen. An. i. 1 ; ii. 1.

<sup>180</sup> De Gen. An. ii. 1.

<sup>181</sup> De Juv. et Sen. 1.



essence are divine ; and also by reason, that if too great a weight were laid upon the part by which he feels and thinks, it would be unable to discharge its proper functions.<sup>182</sup> In the case of animals, whose movements are capricious and arbitrary, not merely the upper parts and the lower, but the hindmost and the foremost, the right and the left, are distinctly stamped ; but, wherever there are no obstacles, and, consequently, no defect, the more noble principle is found in the uppermost and foremost parts, and on the right side.<sup>183</sup> From this Aristotle concluded that, in animals of this kind, all the parts ought to be double, or divided ; and, in order to show that this law was of invariable application, he frequently resorted to many subtleties ; and, nevertheless, was constrained to admit many exceptions to it, arising, not from any superior design, but from necessity.<sup>184</sup> Moreover, he has left this principle unreconciled with his other position, that, wherever it admits of it, no function of life will possess more than a single principle.<sup>185</sup> And, according to which maxim, it is considered a defect for a single organ to be common to several functions.<sup>186</sup> It is evident that the tendency of these propositions, is to make simplicity the standard of excellence in the organical structure of animals. At the same time it is equally obvious, that the characteristics which he advances with this view, are too many not, occasionally, to cross each other, or to afford a measure for the due appreciation of the several grades of animal perfection.

<sup>182</sup> De Part. An. iv. 10.<sup>183</sup> De Part. An. iii. 3 fin.<sup>184</sup> Ib. c. 7.<sup>185</sup> Ib. c. 4.<sup>186</sup> Ib. iv. 6 ; cf. ib. ii. 16.

But he advances others, which, although they are for the most part confined to the difference between plants and animals, and between animals and men, are, nevertheless, of more stable import. Animals differ from plants, principally, by their possessing the faculties of locomotion and sensation, in addition to that of providing themselves with food. Sensation is the property of all animals; at least, they perceive their food by the touch, which is, consequently, the first and most general sense. And as they are endued with sensation, we must ascribe to them pleasure and pain also, which are the necessary consequences of sensation, and give rise to a desire of, and longing for, whatever affords pleasure, and which, simply on this account, is necessary for all animals. All animals, however, are not endowed with the power of voluntary motion.<sup>187</sup> Aristotle carefully distinguishes voluntary from involuntary motion. He, accordingly, starts the question, whether it be possible for animals to be moved only by outward nature; but eventually gives it as his decision, that thought also, and desire, may, likewise, produce motion in animals;<sup>188</sup> since thought and impulse, (*θύμος*), give rise to warmth in the animal body, and thereby set it in motion.<sup>189</sup> But it does not, therefore, follow, necessarily, that all animals, possessing the faculties of nutrition and sensation, possess, likewise, the power of voluntary motion in space. For, if they find the food they require in

<sup>187</sup> De An. i, 2; ii, 2, 3; iii, 9.

<sup>188</sup> Phys. viii, 2; cf. ib. c. 6; de An. Mot. 11.

<sup>189</sup> De Part. An. ii, 4; de An. Mot. 7, 8.

the spot where they are, they have no need of motion, in order to the attainment of this end.<sup>190</sup> All locomotive animals, on the other hand, stand in need of sensation, in order, that they may procure their food. But these require, not merely the chief sense, touch, and taste, which is merely a species of touch,<sup>191</sup> but others also, which do not, like the touch, perceive only what they are in direct contact with, but are also cognisant of what is distant; since, in order to self-preservation, these animals must know what distant objects they ought to pursue or to avoid.<sup>192</sup> Touch and taste are the senses of what is immediately necessary for life; while the others, especially sight and hearing, are only useful to those animals which have sagacity, (*φρόνησις*,) in order to embellish and enhance the pleasures of existence; for it is these which discover the most distinctions. This the sight does immediately, but hearing, indirectly; without which, education would be impossible.<sup>193</sup> Aristotle shows, in the next place, that there can be no more than five senses. In support hereof he alleges, that no sensuous organism for more than five senses is discoverable; that the media by which the senses reach distant objects, fire and water, are incapable of propagating any other impressions than those

<sup>190</sup> De An. iii. 12. τοῖς μὲν γὰρ μονίμοις ὑπάρχει τὸ ὄθεν πεφύκασιν. Cf. de Part. An. iv. 6, 8.

<sup>191</sup> De Sensu, 2.

<sup>192</sup> De An. iii. 12; de Sensu, 1. τούτω γὰρ (sc. τῷ αἰσθάνεσθαι) τὸ ζῶον εἶναι καὶ μὴ ζῶον διορίζομεν. ἰδίᾳ δ' ἤδη καθ' ἑαστον ἢ μὲν ἀφή καὶ γεῦσις ἀκολουθεῖ πᾶσιν ἐξ ἀνάγκης. — αἱ δὲ διὰ τῶν ἐξωθεν αἰσθήσεις τοῖς πορευτικοῖς αὐτῶν.

<sup>193</sup> De Sensu, 1. 1.

of sight, hearing, and smell;<sup>194</sup> and, lastly, that the five senses may be referred to the four elements:—taste and touch to earth, smell to fire, hearing to air, and sight to water.<sup>195</sup> These determinations are manifestly very vague.<sup>196</sup> Aristotle then proceeds to derive from the sensuous perceptions other developments of animal life, which we shall defer to notice until we shall have given an account of his theory of the soul. In the present place, it is sufficient to observe, that reason, which is essentially different from sensation, forms the distinction between man and the brutes.

As our object is to give a faithful delineation of the Aristotelian physiology, we must necessarily give a slight sketch of his doctrines regarding the animal body. As animals are distinguished from plants by sensation and voluntary motion, they must necessarily have a sentient and desiring soul, and a body wisely adapted to it. The body which the soul uses as its instrument, cannot be the first best body;<sup>197</sup> on the contrary, its members must have their several appropriate offices, and all be subservient to the soul.<sup>198</sup> A distinction is to be drawn between the homogeneous and the heterogeneous members of the body. Among the former, the principal are the blood, or, what in bloodless animals is analogous thereto, the flesh and the

<sup>194</sup> De An. iii. 1.

<sup>195</sup> De Sensu, 2.

<sup>196</sup> We have been guided by these passages which are most distinct and express. Still we cannot deny that Aristotle does occasionally, though very obscurely, speak differently at times. De An. iii. 1, 13; consult Trendelenburg in Ar. de An. p. 161, 419.

<sup>197</sup> De An. i. 3.

<sup>198</sup> De Part. An. i. 5.

bones. The blood, or its representative, is not sentient, but is rather the well-digested and refined aliment, and serves chiefly to the nutritive activity of the soul; it is also regarded by Aristotle as a residuum, which, as such, is without sensation, although it exercises considerable influence on the sensuous system, since, as the last nutriment, it forms the matter of the whole body.<sup>199</sup> Aristotle is equally opposed to the opinion that the marrow or brain is the seat of sensation, since these, too, are of a residuous nature, and therefore cannot be sentient.<sup>200</sup> Holding, then, that the blood is the prime aliment of the body, he considered the other homogeneous parts, such as the fat, marrow, and flesh, to be transmutations of blood; for the smaller veins become, according to him, actually flesh, while, potentially, they still continue to be veins.<sup>201</sup> Now the flesh is the instrument of sensation, and, therefore, also the final cause of all other parts of the body.<sup>202</sup> It is the softest constituent of the body, as designed to receive the more easily all outward impressions. On the other hand, the solid parts—the bones, or whatever is the substitute for bones, are both the instruments of motion and the bond and support of the softer or fleshy parts. Thus, then, the homogeneous parts of the animal are formed in conformity to the nature of the animal,

<sup>199</sup> De Part. An. ii. 3, 4.

<sup>200</sup> Hist. An. iii. 19; cf. de Part. An. ii. 6, 7, 10. The brain, however, is distinguished from the exuberant parts of the body. De Part. An. ii. 7.

<sup>201</sup> De Part. An. ii. 5; iii. 5.

<sup>202</sup> Ib. ii. 5. *ἡ δὲ σὰρξ καὶ τὸ ἀνάλογον αἰσθητικόν.* Ib. 8. Compare also de An. ii. 11. *ἐπιτιθεμένων ἐπὶ τὸ αἰσθητήριον οὐκ αἰσθάνεται· ἐπὶ δὲ τὴν σάρκα ἐπιτιθεμένων αἰσθάνεται· ὥστε τὸ μεταξὺ τοῦ ἄπτικου ἢ σάρξ.*

and serve only for the heterogeneous, which, again, must necessarily meet together in a common ground of animal life. In the perfect animals having blood, the sense is this common centre of life, and in the bloodless animals the existence of a similar member must be assumed. The heart binds together the homogeneous and the heterogeneous, since in matter it consists of flesh, but in figure it is heterogeneous.<sup>203</sup> In the heart all the activities of animal life are united, for all the veins meet together in it; two organs are requisite, one for the reception and one for the secretion and assimilation of aliment; the former is in the upper internal portion, and constitutes the head; the other in the lower, and towards the abdomen; while in the middle, between the two, is the principle of life.<sup>204</sup> The heart is also the principle of motion, and therefore is full of tendons, and possesses the purest blood, moderate in quantity and warmth, since the principle of movement must itself be at rest. On this account, and as furnishing to the other members their nutriment, it is the first formed, the least exposed to injury, and the last to die, since it accomplishes its course from beginning to beginning.<sup>205</sup> Lastly, it is also the principle of sensation; for although the flesh is indeed sentient, it nevertheless is not the primary instrument by which,<sup>206</sup> but a medium rather through which, sensation is effected, and is conveyed to the heart;<sup>207</sup> for each sense requires,

<sup>203</sup> De Part. An. ii. 1, 8, 9; iv. 5.

<sup>204</sup> De Part. An. ii. 10; iii. 10; iv. 5.

<sup>205</sup> De Part. An. iii. 4; de Gen. An. ii. 4, 5, 6; de Juv. et Sen. 3, 4.

<sup>206</sup> De Part. An. ii. 10.

<sup>207</sup> De An. ii. 11.

singly, a medium through which the action of the sensible may be carried to the prime sentient.<sup>208</sup> The perceptions of the several senses must necessarily meet together in a common or principal sense; such is the heart, which is therefore seated in the centre of the body.<sup>209</sup> Fully to establish this point, Aristotle refutes, at length, the opinion that the brain is the centre of sensuous perception. The brain, he says, is intended solely for a counterpart to the heart, on which account he makes it to follow immediately after the heart in the animal formation.<sup>210</sup> It is the coldest of all the corporeal parts, and perfectly void of blood, being designed to temper the warmth of the heart, and to produce greater moderation in its vital action. In man it is accordingly larger and moister than in other animals, and in the male than in the female, because the male man has more and warmer blood than all other creatures.<sup>211</sup> For the same reason, the head, which is the seat of the brain, is less fleshy than the other parts of the body; this circumstance makes it a more suitable place for the nicer mechanism of sensation; since, otherwise, the moving heat would impede the accuracy of the senses. Another reason for the head having little flesh is, that it may not be weighed down to the earth.<sup>212</sup> It is to be observed that, according to this account, the office of the brain is far from being lowly estimated, since the moderation of the facul-

<sup>208</sup> *Ib.* c. 7.

<sup>209</sup> *De Somno*, 1; *de Juv. et Sen.* 1, 3.

<sup>210</sup> *De Gen. An.* ii. 6.

<sup>211</sup> *De Part. An.* ii. 7; *Hist. An.* i. 16.

<sup>212</sup> *De Part. An.* ii. 10.

ties of the soul, as we shall hereafter see, is, according to Aristotle, the highest aim to which a rational being can aspire.

We shall abstain from entering further into the structure of the animal body, since the foregoing details are sufficient to explain the psychology of Aristotle, which is the sole end of his physiology. We have already observed that Aristotle refers the different functions of the several parts of the organical body to an equal number of faculties of the soul; so that no corporeal member apart from its connection with the soul can be truly said to be that which its notion indicates; for neither hand nor flesh, without a living soul, is either hand or flesh; they may bear the name, but are really no better than a hand of wood or of stone.<sup>213</sup> According to Aristotle, therefore, the soul is nothing else than the reunion of the different functions which the organical body performs. This indeed, he thus clearly asserts;—every organ has its design; this design is its proper action; from this it follows that the whole body has its design in a perfect action, and this perfect action is the soul.<sup>214</sup> The soul, then, is an action or activity, which, at the same time, has its end in itself, and is an energy or en-

<sup>213</sup> Met. vii. 11; Pol. i. 2; de Gen. An. i. 19; ii. 1. οὐ γάρ ἐστι πρόσωπον μὴ ἔχον ψυχὴν, οὐδὲ σὰρξ, ἀλλὰ φθαρίντα ὁμωνύμως λεχθήσεται τὸ μὲν εἶναι πρόσωπον, τὸ δὲ σὰρξ, ὥσπερ καὶ εἰ ἐγίγνετο λίθινα ἢ ξύλινα.

<sup>214</sup> De Part. An. i. 5. ἐπεὶ δὲ τὸ μὲν ὄργανον πᾶν ἕνεκά του, τῶν δὲ τοῦ σώματος μορίων ἕκαστον ἕνεκά του, τὸ δ' οὐ ἕνεκα πράξις τις, φανερόν ὅτι καὶ τὸ σύνολον σῶμα συνέστηκε πράξειώς τινος ἕνεκα πλήρους. — ὥστε καὶ τὸ σῶμά πως τῆς ψυχῆς ἕνεκεν καὶ τὰ μέρη τῶν ἔργων, πρὸς δὲ πέφυκεν ἕκαστον.

<sup>215</sup> The soul is called entelechy, energy, form, or essence. Met. viii. 3; de Gen. An. ii. 4; de An. ii. 1, 4.



telechy; <sup>215</sup> and the soul, fully defined, is the first entelechy of a physical organical body; <sup>216</sup>—the first, i. e. so far forth as it exists as a soul, even in those essences which are not in activity, but being, as it were, asleep, have merely a potentiality to become active. For the first entelechy in the above definition signifies, a power which is already developed in some way, but which needs not to be in actual operation. In this way does Aristotle reduce the contrariety of body and soul to the fundamental contrariety of his system,—matter and form. It is evident, indeed, that this contrariety is closely connected with his whole view of nature; and also that he could not think of the developments of body and soul otherwise than as being indissolubly connected; for an organic body formed by nature is an indispensable condition to the existence of a soul. Accordingly, he strongly opposed all views which, while they place the soul in the body, do not attempt to show how the union of the two is to be understood. <sup>217</sup> But it is, at the same time, the object of his doctrine, to determine the essential distinction between the body and the soul; the latter is neither a body, nor extended magnitude, but it is a something of body and something in magnitude: <sup>218</sup> it is not fire, in the same manner that the saw is not the

<sup>216</sup> De An. ii. 1. *εἰ δὲ τι κοινὸν ἐπὶ πάσης ψυχῆς δεῖ λέγειν, εἴη ἂν ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ ὁργανικοῦ.*

<sup>217</sup> De An. i. 3 fin. *συνάπτουσι γὰρ καὶ τιθέασιν εἰς σῶμα τὴν ψυχὴν· οὐθὲν προσδιορίζαντες διὰ τίν' αἰτίαν καὶ πῶς ἔχοντος τοῦ σώματος. — παραπλήσιον δὲ λήγουσιν, ὥσπερ εἰ τις φαίη τὴν τεκτονικὴν εἰς αὐλοὺς ἐνδύεσθαι.*

<sup>218</sup> Ib. i. 2, 3; ii. 2. *σῶμα μὲν γὰρ οὐκ ἔστι (sc. ἡ ψυχὴ), σώματος δὲ τι, De An. Mot. 9.*

carpenter; but, nevertheless, heat is necessary to it.<sup>219</sup> These determinations flow necessarily from Aristotle's definition of a soul, since the inner actuating power cannot display its energy unless in a suitable matter. The soul cannot be conceived to be an extended magnitude, since thought is without parts, or at least not a solid magnitude, and cannot, on the occasion of any part soever of extended magnitude, form the cognition of a unity.<sup>220</sup> On this account also, it is not in and cannot be moved in space; and since all other species of change depend upon change in place, so it has, in and by itself, no motion, although, secondarily, it may. For instance, when the body wherein the soul is, is moved, it is itself affected by motion; in the same manner that the sailor is said to be moved when the ship in which he sails is moved; and it is not correct to say that the soul is moved by sympathy, or learns, or thinks, but that all these motions are experienced by man through the medium of his soul. These movements are not in the soul, but either they are accidents to the soul, or they arise out of it. On this account he declares the explanation of the soul as that which moves itself, to be objectionable.<sup>221</sup>

Whoever is capable of apprehending these deter-

<sup>219</sup> De Part. An. ii. 7.

<sup>220</sup> De An. i. 3.

<sup>221</sup> lb. c. 3, 4. *κατὰ συμβεβηκός δὲ κινεῖσθαι, καθάπερ εἶπομεν, ἔστι καὶ κινεῖν ἑαυτήν, ὅσον κινεῖσθαι μὲν ἐν ᾧ ἔστι, τοῦτο δὲ κινεῖσθαι ὑπὸ τῆς ψυχῆς. — βέλτιον γὰρ ἴσως μὴ λέγειν τὴν ψυχὴν ἡλεῖν ἢ μαρθάνειν ἢ διανοεῖσθαι, ἀλλὰ τὸν ἄνθρωπον τῇ ψυχῇ. τοῦτο δὲ μὴ ὡς ἐν ἐκείνῃ τῆς κινήσεως οὕσης, ἀλλ' ὅτι μὲν μέχρι ἐκείνης, ὅτι δ' ἀπ' ἐκείνης, ὅσον ἢ μὲν αἰσθησίς ἀπὸ τῶνδ', ἢ δ' ἀνάμνησις ἀπ' ἐκείνης ἐπὶ τὰς ἐν τοῖς αἰσθητηρίοις κινήσεις ἢ μονάς. Phys. viii. 6. Whatever moves itself but possesses an extended magnitude, since nothing that is without parts can move.*

minations in their true Aristotelian sense, will find them to be closely connected with his notion of the soul; and at the same time they will perceive how earnestly Aristotle sought, by his definition of the soul, to enhance its value and importance. As form and entelechy of the living body it is above all natural generation and motion, and all corporeal existence; for it is the cause and principle of body, and this too in all the three several ways in which the idea of an immaterial cause is understood by Aristotle. It is the cause as the essence (*οὐσία*) of body, inasmuch as the essence is the cause of all things, but the life is the entity of all living things, and the soul is the ground and cause of life. It is the cause as end, since in all living things the final cause is the soul; for all physical bodies are merely the instruments of the soul. It is also the moving cause, since local motion, sensation, and growth, issue from the soul, which moves by its will both the moving and the moved in the body; over which, as the better principle, it exercises unlimited authority.<sup>222</sup> It thus exhibits itself as the supra-sensible form of the ensouled body, which holds together the infinitely divis-

<sup>222</sup> De An. ii. 4. ἔστι δὲ ἡ ψυχὴ τοῦ ζῶντος σώματος αἰτία καὶ ἀρχή· — καὶ γὰρ ὅθεν ἡ κίνησις αὐτὴ καὶ οὐ ἔνεκα καὶ ὡς ἡ οὐσία τῶν ἐμψύχων σωμάτων ἡ ψυχὴ αἰτία. ὅτι μὲν οὖν ὡς οὐσία δῆλον· τὸ γὰρ αἴτιον τοῦ εἶναι πᾶσι ἡ οὐσία, τὸ δὲ ζῆν τοῖς ζῶσι τὸ εἶναι ἔστιν, αἰτία δὲ καὶ ἀρχὴ τούτων ἡ ψυχὴ· ἔτι τοῦ δυνάμει ὄντος λόγος ἡ ἐντελέχεια. φανερόν δ' ὡς καὶ οὐ ἔνεκεν ἡ ψυχὴ αἰτία. ὥσπερ γὰρ ὁ νοῦς ἔνεκά του ποιεῖ, τὸν αὐτὸν τρόπον καὶ ἡ φύσις, καὶ τοῦτ' ἔστιν αὐτῇ τέλος. τοιοῦτον δ' ἐν τοῖς ζῶσις ἡ ψυχὴ καὶ κατὰ φύσιν· πάντα γὰρ τὰ φυσικὰ σώματα τῆς ψυχῆς ὄργανα. — ἀλλὰ μὴν καὶ ὅθεν πρῶτον ἡ κατὰ τόπον κίνησις, ψυχὴ. — ἔστι δὲ καὶ ἀλλοιώσις καὶ αὐξησης κατὰ ψυχὴν· ἡ μὲν γὰρ αἰσθησις ἀλλοιώσις τις εἶναι δοκεῖ. De An. Mot. 9; Pol. i. 5.

ible matter of the body, and effects the unity of the ensouled body.<sup>223</sup> Upon a consideration of Aristotle's theory of nature in connection with his more general definitions, we are forced to confess that Aristotle, when the occasion arrived for determining the notion of the soul in contradistinction to the body, could not well advance any more worthy notion of it; in short, that this was the only place that he could give to it in his system. For body he considers as merely phenomenal, and the soul reveals itself in the phenomena of the body as an active energy or principle. In his attempt, therefore, to determine the idea of soul, he was of necessity driven to look for it among the principles of the phenomenal. But here again he was obliged to exclude the notion of matter, which is nothing more than a ground of the corporeal, and consequently the soul can only be regarded as the formal cause in nature, which is the theatre in which the soul produces all phenomena in living bodies. If, then, the Aristotelian notion of soul should appear defective; if it should even be found to be an inconsistency in his speaking, at one time, of parts, and even of changeable parts of the soul,<sup>224</sup> and refusing, at another, to admit that the soul is multiple or moveable, still it is not the definition itself, but his general system, that must bear the blame. On this point we have further to remark that, with

<sup>223</sup> De An. I. I. ; ib. i. 5.

<sup>224</sup> Hereto belongs the desiring and also the sentient soul. It is true sensation is also ascribed to energy, but it is also named motion and change. This is a point of the Aristotelian theory in which confusion was inevitable. Cf. Phys. vii. 2, 3.

Aristotle, the notion of soul stands in the same relation to that of reason, as the notion of nature does to that of God. It stands, therefore, intermediate between the supreme ground and the phenomena of nature,<sup>235</sup> and strictly to observe the true limits of such a mean is extremely difficult.

By the division of the living creatures which we previously sketched, that of the faculties of soul is necessarily regulated. The nutritive faculty is alone the property of vegetables; sensation of animals generally; of the more perfect races, local movement likewise; and of man, reason. The soul, therefore, is divided into the nutritive faculty, the sensitive, the locomotive; and, lastly, the rational. This is the principal division, which, however, gives rise to a further subdivision. But the mutual relation of these four parts is such, that their value is determined by their order, while each preceding is the necessary condition of the following. Thus the nutritive soul may subsist apart from the sensitive, but the sensitive is invariably combined with the nutritive. Sensation may be without the faculty of locomotion, but the latter cannot subsist apart from the former. The rational soul alone forms an exception from the general law, and Aristotle advances it as at least questionable whether the reason may not be independent of all the lower faculties, because it is separate from body.<sup>236</sup> To this gradation in the faculties of the soul, Aristotle again applies his fundamental principle, that the

<sup>235</sup> De An. i. 5. τῆς δὲ ψυχῆς εἶναι τι κρείττον καὶ ἄρχον ἀδύνατον ἀδυνατώτερον δ' ἐστὶ τοῦ νοῦ.

<sup>236</sup> De An. ii. 2; de Gen. An. ii. 3.

more perfect evolves itself out of the less perfect. Accordingly, the foetus in the womb has only the nutritive soul, and is like a vegetable; it is only afterwards, that in animals, the sensitive and locomotive soul is formed, out of what had hitherto been merely an inactive potentiality; and with man his peculiar faculty of reason is formed the last.<sup>227</sup>

As regards the nutritive soul, it has already been observed that propagation is ascribed to it, which indeed, Aristotle regards as the proper end of the nutritive faculty, and consequently advances the opinion that perhaps it would be more consonant with propriety to call the soul, which has the property to reproduce its kind, the primary soul. For this is the regulation which nature has made in order that she herself may ever be full; that perishable things, which in number never remain identical, and cannot have part in the eternal and divine, may at least be eternal, according to species and form, by ever tending to create things like to themselves.<sup>228</sup> Wherever there does not exist a principle of life potentially manifold, propagation is effected by seed; this, however, is a production of the nutritive faculty, a residuous secretion,<sup>229</sup> which is produced by the generating as by a moving form, and which possesses the faculty to move. But the actual movement which manifests itself as the nutritive faculty, is first received by the seed from without by means of the moving cause.<sup>230</sup> Ac-

<sup>227</sup> De Gen. An. i. 1.

<sup>228</sup> De An. ii. 4; de Gen. An. ii. 1.

<sup>229</sup> De Gen. An. i. 18.

<sup>230</sup> Ib. ii. 1.

cordingly, Aristotle considers a suitable matter and form to be requisite for the propagation of animals; in those essences, however, which are without the separation into male and female, both form and matter are combined together in the producer. There the male principle furnishes the moving form, or soul, and the female the matter, or body.<sup>231</sup> In this manner the several species of living beings are propagated, and there is a continual reproduction, not indeed of the same, but of another, which is, however, similar, because the same form does not develop itself in the same matter. Consequently, the difference of the individual is produced by the matter, for although the special material condition of the moving cause does, in truth, exercise an influence thereon, no end is intended by this difference.<sup>232</sup> It is singular to observe how Aristotle, in spite of his indisposition to assign any essence to the general, nevertheless here makes the general, rather than the individual, to be the vital force in nature, although this, indeed, is so far limited, that the eternal genus must always invest itself in an individual figure, before it can exhibit itself active on the special. The life that is thus produced preserves itself, by the same faculty, in a somewhat different mode of activity, namely, nutritive. Nutrition is carried on only in certain respects through the similar, and partly through the dissimilar, since the undigested food is dissimilar to the body to be nourished, but, when digested, is assimilated to the members to be nour-

<sup>231</sup> L. i. 1.; ib. ii. 3, 4.

<sup>232</sup> Ib. v. 1; Met. x. 9.

ished. Vital warmth is the mean of nutrition, which effects digestion; but it is not absolutely a cause; for it is the soul which effects nutrition, as is clear from the circumstance that nutrition does not proceed without limit, like the growth of fire, but according to a certain end and ratio (λόγος) of magnitude, which can only be laid down by the form and limit.<sup>233</sup> As, however, everything that has matter is transitory, the destruction of the aggregated body must necessarily follow its nutrition. In effecting this result, surrounding nature co-operates. For nature, which is opposed to the living body, contributes to its nourishment, and also to its dissolution, and the latter takes place as soon as the limited and formed matter becomes, by the influence of surrounding nature, too powerful for the limiting form.<sup>234</sup>

We have already seen that there is a connection between the sensitive soul and the bodily organisation of the animal. Animals are sentient because they possess a central principle to receive the form of the sensible, and it is in this that the faculty of sensation consists.<sup>235</sup> Sensation, therefore, is dependent upon the sensible, which produces a change in the sentient, and is external to it. It is thus distinguished from cogitation, that sensation refers exclusively to the particular. Sensation in the soul is compared by Aristotle to the impression of a

<sup>233</sup> De An. ii. 4. Fire is here taken, conformably to a common opinion, for vital warmth; which Aristotle does not consider it necessary to refute.

<sup>234</sup> De Long. et Brev. Vitæ, 3; de Juv. et Sen. 6; Met. iv. 1. γίνεται δ' ἡ φθορά, ὅταν κρατῇ τοῦ ὀρίζοντος τὸ ὀριζόμενον διὰ τὸ περιέχον.

<sup>235</sup> De An. ii. 12; iii. 2.



seal on wax. The matter of the seal is not received by the wax, but the form only; in the same manner, the soul receives merely the form of the sensible, and before sensation the soul is dissimilar to the sensible; but after sensation it is assimilated to it.<sup>236</sup> The sensuous impression is effected immediately on the sensuous organs, hence there are five classes of sensation, corresponding to the several organs. Now as these sensations are perceived to differ from each other, and as this cannot be perceived by any particular sense, since each sense is only percipient of its appropriate objects, a common sense must be assumed, which may combine and compare the several sensations. This, according to what was formerly shown, is the heart. Its object is, further, to receive and to perceive those sensuous representations which are not perceptible by any of the five special senses, viz. motion, time, number, and the like.<sup>237</sup> From sensation the more perfect animals evolve, imagination, memory, and recollection. Imagination or conception (*φαντασία*) is a weaker sensation, and is explained by the motion which sensation leaves behind in the soul, and which continues a certain period.<sup>238</sup> It does not belong to any special organ, but it is a state of the common sense.<sup>239</sup> Memory is not altogether independent of sensuous representation, but it is distinguished from it by combining with the sensation a

<sup>236</sup> 1b. ii. 5, 12.

<sup>237</sup> De An. ii. 6; iii. 1, 2; de Somno, 1; de Juv. et Sen. 1, 3.

<sup>238</sup> Rhet. i. 11. ἡ δὲ φαντασία ἐστὶν αἰσθησίς τις ἀσθενής. De An. iii. 3. ἡ φαντασία ἂν εἴη κίνησις ὑπὸ τῆς αἰσθήσεως τῆς κατ' ἐνέργειαν γιγνομένης. De Insomn. 2.

<sup>239</sup> De Mem. 1.

perception that it had had this particular representation before. On this account it belongs only to those animals that have a perception of time, and is effected by the same faculty as sensuous conception. In and by itself it applies solely to what is sensuously conceivable, but secondarily also to whatever cannot be conceived apart from a sensuous representation.<sup>240</sup> Aristotle distinguishes recollection from memory, and makes it to belong to men only, and not, like memory, to animals also. The difference between them consists in this, that in memory we repeat, without design or intention, whatever has previously occurred; whereas in recollection there is a voluntary search for it. Consequently, those animals alone are endowed with the faculty of recollection, which act with design. This search of previous representations is accomplished by an association of conceptions, while one movement reproduces an earlier movement. Recollection, likewise, belongs naturally to the common sense.<sup>241</sup>

By assigning, as we observed formerly, an instinct to all animals, Aristotle gained a stable point for his definition of the moving force which he ascribed to the more perfect animals. Nevertheless, he distinguished the moving principle from instinct, as never giving rise to voluntary motion. On the contrary, there are many animal motions which are necessary results of the physical changes of the corporeal frame alone, and dependent upon particular members, and not upon the soul.<sup>242</sup> On

<sup>240</sup> L. 1.

<sup>241</sup> *De Mem.* 2; *Hist. An.* i. 1.

<sup>242</sup> *De An. Mot.* 11.

the other hand, the ground of all motion which issues from the soul, is that which excites desire or aversion, on the supposition of its attainment.<sup>243</sup> The sensation which it gives rise to, or the conception of it, must, however, be already existing in the soul before it can become active as a moving force. Hence it is clear that animals only can possess voluntary motion, since they alone are endued with sensation. But sensation is invariably accompanied with pleasure and pain, and these are always followed by desire (*ἐπιθυμία*).<sup>244</sup> For pleasure is the completion of every activity of which it is the end; and as activity is the life of all animals, all of whom desire life, pleasure must be the term towards which they all strive.<sup>245</sup> In this we may see how Aristotle makes voluntary motion and action, generally, to be dependent upon the sensuous perception, or the conception, or thought; or, in still more general terms, the practical upon the theoretical. For a certain degree of warmth or coldness attends every act of conception or thought which changes the body, and thereby produces a motion, which is at first very slight, but soon becomes greater and greater, the more it is removed from the point of impulsion; and in this manner

<sup>243</sup> Ib. vi. 8; de An. iii. 10. διὸ αἰεὶ κινεῖται μὲν τὸ δρεκτόν, ἀλλὰ τοῦτ' ἔστιν ἢ τὸ ἀγαθόν ἢ τὸ φαινόμενον ἀγαθόν, οὐ πᾶν δέ, ἀλλὰ τὸ πρακτόν ἀγαθόν.

<sup>244</sup> De An. ii. 2, 3.

<sup>245</sup> Eth. Nic. x. 4. τελειοῖ δὲ τὴν ἐνέργειαν ἡ ἡδονή, οὐχ ὥς ἡ ἕξις ἐνυπάρχουσα, ἀλλ' ὥς ἐπιγιγνόμενόν τι τέλος. — δρέγεσθαι δὲ τῆς ἡδονῆς οἰηθεὶς τις ἂν ἅπαντας, ὅτε καὶ τοῦ ζῆν ἅπαντες ἐφίενται· ἡ δὲ ζωὴ ἐνέργειά τις ἐστι. — ἡ δὲ ἡδονὴ τελειοῖ τὰς ἐνεργείας· καὶ τὸ ζῆν δέ, οὐ δρέγονται· εὐλόγως οὖν καὶ τῆς ἡδονῆς ἐφίενται· τελειοῖ γὰρ ἐκάστῳ τὸ ζῆν αἰρετόν ὄν.

a motion is produced in the body by the operation of the idea.<sup>246</sup> The same view is strikingly presented in the explanation of the transition from conception to action, which is compared by Aristotle to the process of illation by the syllogism. The proposition asserts something of good, the assumption asserts something of the possible, and the conclusion is the act itself.<sup>247</sup> This act of inference is ascribed by him even to the irrational part of the soul; for, he says, it makes no difference whether the major premiss be drawn from sensation or from the intellect.<sup>248</sup> He believes desire to be inseparable from sensation and appetite.<sup>249</sup> On this account the desire is not placed in the rational part of the soul, although it must be ruled by it, and thereby participate in reason; nevertheless, relatively to reason it is always to be regarded as simply passive.<sup>250</sup>

We have already spoken of the rational part of the soul, so far as it is relative to cognition. As it constitutes whatever is divine and eternal in man, the investigation into its nature does not properly belong to physics. If, therefore, Aristotle, in his physical disquisitions upon the soul, treats of the

<sup>246</sup> De An. Mot. 7, 8.

<sup>247</sup> Ib. 7. ὅτι μὲν οὖν ἡ πράξις τὸ συμπέρασμα φανερὸν· αἱ δὲ προτάσεις αἱ ποιητικαὶ διὰ δύο εἰδῶν γίνονται, διὰ τε τοῦ ἀγαθοῦ καὶ διὰ τοῦ δυνατοῦ. De Mem. 2.

<sup>248</sup> De An. Mot. 1. 1. ποτίον μοι, ἡ ἐπιθυμία λέγει· τοῦ δὲ ποτόν, ἡ αἰσθησις εἶπεν ἡ ἡ φαντασία ἡ ὁ νοῦς· εὐθὺς πίνει.

<sup>249</sup> De An. ii. 3. ὥ δ' αἰσθησις ὑπάρχει, τούτῳ ἡδονὴ καὶ λύπη καὶ τὸ ἡδύ τε καὶ λυπηρόν, οἷς δὲ ταῦτα, καὶ ἡ ἐπιθυμία· τοῦ γὰρ ἡδίου δρεξίς αὕτη. — ἰνίοις δὲ πρὸς τούτοις ὑπάρχει καὶ τὸ κατὰ τόπον κινήτικόν.

<sup>250</sup> Pol. i. 5.

reason, his object is merely to show how the reason works as an instrument in nature,<sup>251</sup> and to point out the limits of physical inquiry, without any intention of drawing the matter itself into the domain of physics. Now as Aristotle considers reason to be the peculiar characteristic of man, he naturally assigns the place of its science to that of man or to ethics. Reason he appears to regard as something foreign to physics; since it is not dependent upon the form of body, and is without any appropriate organ to which its activity attaches itself, and while all other faculties of the soul result from the natural development of the body by means of the moving cause; the reason, on the contrary, comes to man from without. On this account, it is also described as impassive and incomposite; and although it is incapable, indeed, of exerting the same activity in the debilitated organs of old age, as in the vigorous senses of youth; it nevertheless suffers nothing from age, but exists in man as an independent essence, and incapable of destruction.<sup>252</sup> This, however, is only true of the active intellect, for the passive is dependent upon conception, and therefore bound up with the sensuous organs.<sup>253</sup>

<sup>251</sup> Probl. xxx. 5. ἔστι γὰρ καὶ ὁ νοῦς τῶν φύσει ἐν ἡμῖν ὥσπερ ὄργανον ὑπάρχων.

<sup>252</sup> De An. i. 4. ὁ δὲ νοῦς ἔοικεν ἐγγίνεσθαι οὐσία τις οὐσα καὶ οὐ φθείρεσθαι. μάλιστα γὰρ ἐφθείρεται ἂν ὑπὸ τῆς ἐν τῷ γήρᾳ ἀμαυρώσεως. Probl. i. l.

<sup>253</sup> Very attractive is Trendelenburg's view of the obscure notion of the passive intellect, which, in his notes on Arist. p. 493, he thus expresses: Quæ a sensu inde ad imaginationem mentem anteceperunt, ad res percipiendas menti necessaria, sed ad intelligendas non sufficiunt. Omnes illas, quæ præcedunt, facultates in unum quasi nodum collectas, quatenus ad res cogitandas postulantur, νοῦν παθητικὸν dictas esse judicamus. In support of this view he might allege, Eth. Nic. vi. 12. ἐκ τῶν καθ' ἕκαστα καὶ τὸ καθόλου. τούτων

The active intellect alone is eternal and imperishable.<sup>254</sup> It belongs, however, not to individuals but to all.<sup>255</sup> It constitutes not only the characteristic, but also the true essence of the man, with which, however, in the mutations of life, sensation is mingled.<sup>256</sup> Thus, then, even in the terrestrial life of

*ὅν ἔχειν δεῖ αἰσθῆσιν. αὕτη δ' ἐστὶ νοῦς.* But it must be limited by the condition that the *νοῦς παθητικὸς* only so far indicates these sensuous postulates of thought as they are understood to be perfectly abstract, and as containing nothing actual for the understanding, but merely affording the power of receiving rational thought. This is strongly established by repeated remarks, especially by *de An. iii. 4. ὥστε μὴδ' αὐτοῦ εἶναι φύσιν μηδεμίαν, ἀλλ' ἡ ταύτην, ὅτι δυνατόν.* — *οὐθὲν ἐστὶν ἐνεργείᾳ τῶν ὄντων πρὶν νοεῖν.* The difference between the active and the passive intellects is founded, in general, on the idea that every becoming must be preceded by a potentiality, which is passive while it is realised. But it is also connected, on the one hand, with the view that the divine agency in the world, as revealed in the *νοῦς*, is necessarily free from all obstacles to its activity—from all matter; and, on the other hand, with the idea that it cannot enter into any soul not properly prepared for it. On this side, consequently, the *παθητικὸς νοῦς* is to be understood as it is explained by Trendelenburg; but, on the other, as nothing, according to actuality. Between these different views we find a constant fluctuation, wherever the operations of divine grace, and man's capacity of receiving them, are spoken of.

<sup>254</sup> *De An. Mot. iii. 5.*

<sup>255</sup> Whether Aristotle taught the soul's immortality is an ancient question. See Wyttienbach *de Immortalitate Animi*, Opusc. tom. ii. p. 601 sq. The dispute cannot be settled by any passage in his extant works. The passage *de An. iii. 5, οὐ μνημονεύομεν δέ, ὅτι τοῦτο ἀπαθείς*, has been wrongly interpreted; its correct sense is given above. Even the passage *Eth. Nicom. iii. 4.* proves nothing, as Zell has rightly shown in his *Anmerkungen*, p. 89. The extracts from the lost dialogues of Eudemus, which are given in *Cicero de Divin. i. 25*, *Plut. Cons. ad Apoll. 27*, are insufficient as proofs, since we know not whether this dialogue was intended to convey his really scientific doctrines. On the same ground, the fragment in *Sext. Emp. adv. Math. ix. 20*, is unconvincing, notwithstanding that it speaks of a separation of the soul from the body. We must, therefore, draw our conclusion on this point from the general context of Aristotle's doctrine; and from this it is clear that he had no conception of the immortality of any individual rational entity, although he did ascribe an eternal existence in God to the universal reason.

<sup>256</sup> *Eth. Nic. ix. 4, 8. ὡς τούτου (τοῦ νοῦ) ἐκάστων ὄντος.* *Ib. c. 9. τὸ γὰρ εἶναι ἦν τὸ αἰσθάνεσθαι ἢ νοεῖν.* *Ib. x. 7. τὸ γὰρ οἰκεῖον ἐκάστω τῇ φύσει κράτιστον καὶ ἡδιστόν ἐστιν ἐκάστω· καὶ τῷ ἀνθρώπῳ δὴ ὁ κατὰ τὸν νοῦν βίος, εἴπερ τοῦτο μάλιστα ἀνθρώπος.*

natural things, reason is the ultimate end, for it has been shown elsewhere that man is the end of earthly objects.

We have here further to mention, that, according to Aristotle, the reason is divided into practical and theoretical, according as it is either exclusively engaged in cognition, or, by means of cognition, enters upon action. We formerly showed that desire is the last cause of motion and action, and that desire remounts ultimately to sensation, or the presentation, or the rational conception.<sup>257</sup> When the latter is the case, there is in the soul, the thought of something to be accomplished.<sup>258</sup> The theoretical reason is distinguished from the practical, by the end. The former proceeds from reasoning to knowledge; the latter to action.<sup>259</sup> For the reason stands in the same relation to desire, as sensation and the sensuous presentation. Both exhibit to us the good, and alike refer it to the special relations of the agent, in such a manner that the conclusion follows of necessity, that this or that is to be done. However, the conclusions of the practical reason are as invariably right as the assertions of the theoretic reason; whereas, on the other hand, the conclusions of the sensuous presentation concerning good may be erroneous. Consequently, desire is, at times, directed to real, at times, to ap-

<sup>257</sup> De An. Motu. 7. οὕτως μὲν οὖν ἐπὶ τὸ κινεῖσθαι καὶ πράττειν τὰ ζῶα ὁρμῶσι τῆς μὲν ἐσχάτης αἰτίας τοῦ κινεῖσθαι ὁρίξειως οὐσης, ταύτης δὲ γινομένης ἢ δι' αἰσθήσεως ἢ διὰ φαντασίας καὶ νοήσεως.

<sup>258</sup> L. 1.

<sup>259</sup> De An. iii. 10. διαφέρει δὲ (sc. ὁ πρακτικὸς νοῦς) τοῦ θεωρητικοῦ τῷ τέλει. De An. Mot. 7. ἀλλ' ἐκεῖ μὲν θεώρημα τὸ τέλος — ἐνταῦθα δ' ἐκ τῶν δύο προτάσεων τὸ συμπέρασμα γίνεται ἢ πράξις.

parent good;<sup>260</sup> and desire, in its most important determinations, may be divided into rational desire, or the will (*βούλησις*), and the sensuous desire, and extends its activity over all the parts of the animal and sentient soul.<sup>261</sup> Its different desires may also be opposed to each other; and, at times, the rational desire can regulate the soul's emotions, as in the case of the temperate man, but, at others conversely, be overruled by the irrational, as in the case of the intemperate.<sup>262</sup> Now, whether we obey the sensuous or the rational desire, we act, in both cases, equally with free-will, and are, consequently, deserving of praise or blame. For the principle of action is internal; and it lies within man's power to follow the reason or not, so that he himself is the author, as the case may be, of his own virtue or vice; for, otherwise, it would be idle to exhort man to virtue, and alike unjust, either to punish or reward him.<sup>263</sup> But the determinations and conclusions concerning rational or irrational conduct, belong to ethics rather than to physics.

<sup>260</sup> De An. i. 1. *νοῦς μὲν οὖν πᾶς ὀρθός, ὁρεῖς δὲ καὶ φαντασία καὶ ὀρθή καὶ οὐκ ὀρθή. διὸ αἰεὶ κινεῖ μὲν τὸ ὀρεκτόν. ἀλλὰ τοῦτ' ἐστὶν ἡ τὸ ἀγαθὸν ἢ τὸ φαίνόμενον ἀγαθόν.*

<sup>261</sup> Ib. c. 9. *καὶ ἀποπον δὴ τοῦτο (τὸ ὀρεκτικόν) διασπᾶν· ἐν τε τῷ λογιστικῷ γὰρ ἡ βούλησις γίνεται καὶ ἐν τῷ ἀλόγῳ ἡ ἐπιθυμία καὶ ὁ θυμός. εἰ δὲ τρία ἡ ψυχὴ ἐν ἐκάστῳ ἐστὶ ὅρεῖς. Eth. Nic. iii. 5; Eth. Eud. ii. 7.* The notion *θυμός* is not more closely limited by Aristotle, than by Plato. At times, *ἐπιθυμία* and *θυμός* only indicate *πάθος* of the soul, Eth. Eud. ii. 2; Eth. Nic. ii. 4, at times the term *θυμός* is applied to the part of the soul which loves. Pol. vii. 7. The notion of *βούλησις* is equally vague. Pol. vii. 15 *fin.*

<sup>262</sup> De An. i. 1. ; c. 10; Eth. Nic. i. 13.

<sup>263</sup> Eth. Nic. iii. 1, 3, 7, 8. *τῶν μὲν γὰρ πράξεων ἀπ' ἀρχῆς μετρί τοῦ τίλους κύριοί ἐσμεν, εἰδότες τὰ καθ' ἕκαστα, τῶν ἔξιων δὲ τῆς ἀρχῆς. Eth. Eud. ii. 6, 8; Mag. Mor. i. 13. ὁ γὰρ μὴ ἐκὼν οὐκ ἐστὶ ψεκτός.*



## CHAPTER V.

### ETHICS OF ARISTOTLE.

THE form which Aristotle has given to his ethical doctrines suggests the remark, which has so obviously been presented by all his other philosophical works. The several investigations are far from being reduced into a coherent whole; so that, starting from a natural connecting point, they are evolved easily and perspicuously. The repetitions are numerous and considerable; and, occasionally, Aristotle himself confesses that it would be advisable to give a new form to the development of his theory.<sup>1</sup> We are far, however, from pretending to deny that a certain intrinsic coherency is to be found in his ethical system; nevertheless, as this is not always manifest, nor easily traceable throughout, we think ourselves justified in giving to our exposition of this theory, a different order from that which Aristotle himself has followed. Perhaps, indeed, the looseness of his method may, in some measure, be accounted for, by his holding with Plato, that ethics and physics do not admit of such stringency of conclusion as the other investigations of philosophy, which are not conversant about matter.<sup>2</sup>

The principal divison of his ethical inquiries is

<sup>1</sup> E. g. *Eth. Nic.* vii. 1; *Eth. Eud.* ii. 6; *Magn. Mor.* ii. 4.

<sup>2</sup> *Eth. Nic.* i. 1; vii. 1; *Eth. Eud.* i. 6; cf. *Met.* ii. 3.

alone distinctly traceable. Politics, by which term he would prefer to designate all ethical investigations in general, comprises all those disquisitions whose object is human good, as well in the individual, as in the family, and in the state;<sup>3</sup> and, accordingly, he makes three principal divisions of politics,—Ethics, Economics, and Politics, in a narrower sense. Ethics, which investigates the moral good of the individual, he deems to be the basis of all the other parts of politics; since, in the absence of good morals, there can be nothing good or excellent in a state.<sup>4</sup> Next in order is the Economics, which treats of the right management of the family; and which must, necessarily, precede the Politics, inasmuch as the family is the foundation of the state.<sup>5</sup>

Before however we enter upon the several parts of Aristotle's ethical theory, it is of great importance to consider the relation in which this portion of his philosophy stands to his physical and logical doctrines. In the first place, we must admit, that the connection between ethics and these other sciences is not so close and intrinsic in Aristotle, as in Plato. Aristotle, as we have already seen, looked upon the reason of the individual, as it were, an interpolation in nature,—an element emigrated from a strange sphere into this sublunary portion of the world. With him, therefore, the moral life of man is a something distinct from that of the rest of the world; and, accordingly, there is no attempt

<sup>3</sup> *Eth. Nic.* i. 1; *Magn. Mor.* i. 1; *Rhet.* i. 2.

<sup>4</sup> *Magn. Mor.* i. 1.

<sup>5</sup> *Pol.* i. 3.

in the ethics to advance anything like a moral view of the universe and its development. While Plato considered it impossible to speak of man's moral condition, without remounting to the consideration of good in itself, or divine good; Aristotle's principal object is to determine what is good for man solely, and he accordingly confines himself to human or political good. He expressly asserts that the knowledge of the one is possible, even without the knowledge of the other; indeed, that a knowledge of absolute good does, in no way, facilitate the knowledge of that good, which alone is attainable in human life.<sup>6</sup> It is evident, therefore, that Aristotle takes up a lower position in his ethical theory, than Plato. Still, it cannot be denied, that his ethics is, nevertheless, closely connected with his physiology and logic.

In the first place, the division of politics is relative to his physical doctrines, in so far as Aristotle makes the distinction between man and other animals to consist, not merely in his participating more highly in the divine, and being, on that account, capable of rational reflection, and, consequently, of living virtuously,<sup>7</sup> but also in his being by nature a domestic and political animal.<sup>8</sup> This involves, on the one hand, the fundamental principle of the Aristotelian ethics, that morality in the individual, or in society, is a something, which grows out of his natural endowments and destination. But, on the other, it is perfectly conso-

<sup>6</sup> Eth. Nic. i. 4; Eth. Eud. i. 7; Magn. Mor. i. 1.

<sup>7</sup> De Part. An. ii. 10; Hist. An. i. 1.

<sup>8</sup> Eth. Nic. i. 5; Eth. Eud. vii. 10; Pol. i. 2.

nant with the character of his physiology, which teaches that nature herself tends also to good, and that the end is a work of nature;<sup>9</sup> and that, consequently, the moral animal can pursue nothing but what has been given to him by nature. Accordingly, Aristotle declares that nothing, which is contrary to nature, can be morally beautiful;<sup>10</sup> and that nothing can be morally good, which is not also good by nature.<sup>11</sup> Nature has implanted in man an impulse to action and desire, without which, no act would ever be accomplished; so that all the moral acts of man must attach themselves to some natural disposition as its basis.<sup>12</sup> In this direction, Aristotle proceeds so far as to coincide with Plato; and to speak of virtues which arise in things by nature, which, however, he declares to be trivial and of little worth. Indeed he regards these natural virtues in no higher light than as so many instincts to good acts, which, however, must be associated with a moral intelligence in order to become moral virtues.<sup>13</sup>

It is deserving of notice that, on this point, Aristotle directly controverts Socrates: for Socrates, whose doctrine was in its tendency more dialectical than physical, looked to the dialectical exclusively for the ground of all morality; with him,

<sup>9</sup> De An. iii. 12. τέλος —, ὃ ἐστὶ φύσει ἔργον.

<sup>10</sup> Pol. vii. 3. οὐδὲν δὲ τῶν παρὰ φύσιν καλόν.

<sup>11</sup> Eth. Eud. vii. 15. ἀγαθὸς μὲν οὖν ἐστίν, ὃ τὰ φύσει ἀγαθὰ ἐστὶν ἀγαθόν. Pol. vii. 13.

<sup>12</sup> Magn. Mor. ii. 4.

<sup>13</sup> Magn. Mor. i. 34. εἰσὶν ἀρεταὶ καὶ φύσει ἐν ἐκάστοις ἐγγιγνόμεναι, ὅσον ὄρμαί τινες ἐν ἐκάστῳ ἀνευ λόγου πρὸς τὰ ἀνδρεῖα καὶ τὰ δίκαια καὶ καθ' ἐκάστην πρὸς τὰ τοιαῦτα. Ib. ii. 3, 7 fin.; Eth. Nic. vi. 13; Eth. Eud. v. 13; Pol. i. 1.

accordingly, all morality was grounded in reason and science. Even Plato had, in some degree, dissented from Socrates, and had shown that valour and temperance, as two necessary aspects of virtue, must be assisted by the natural disposition of the individual, and that their seat is not in the reason, but in the concupiscence and the spirit. But Aristotle, in consequence of the more decided physical character of his ethical inquiries, proceeded still further in his opposition to Socrates. He did not consider reason, but the natural bias and the passive states of the soul (*πάθη*), to be the first ground of virtue. For an irrational impulsion towards good first arises; after which, the reason steps in to give its accordance to the good act. This is manifest in the case of children, who, at first instinctively and unconsciously pursue the good which they subsequently learn to perform with reason and consciousness.<sup>14</sup> An unstunted nature and a good disposition are necessary to virtue; and, for this reason, neither the ox nor the horse can attain to it; nay, not even man himself in every circumstance of his life. For virtue requires a certain disposition of body and soul;<sup>15</sup> and it is only when his nature has attained to its full

<sup>14</sup> *Magn. Mor.* ii. 7. ἀπλῶς δ' οὐχ, ὥσπερ οἶονται οἱ ἄλλοι, τῆς ἀρετῆς ἀρχὴ καὶ ἡγεμὼν ἐστὶν ὁ λόγος, ἀλλὰ μᾶλλον τὰ πάθη. δεῖ γὰρ πρὸς τὸ καλὸν ὁρμὴν ἀλογόν τινα πρῶτον ἐγγίνεσθαι, ὃ καὶ γίνεται, εἴθ' οὕτως τὸν λόγον ὕστερον ἐπιψηφίζοντα εἶναι καὶ διακρίνοντα. ἴδοι δ' ἂν τις τοῦτο ἐκ τῶν παιδίων καὶ τῶν ἀνευ λόγου ζώντων. ἐν γὰρ τούτοις ἀνευ τοῦ λόγου ἐγγίνονται ὁρμαὶ παθῶν πρὸς τὸ καλὸν πρότερον, ὃ δὲ λόγος ὕστερος ἐπιγινόμενος καὶ σύμφηφος ὧν ποιῇ πράττειν τὰ καλὰ.

<sup>15</sup> *Pol.* vii. 13. καὶ γὰρ φύναι δεῖ πρῶτον οἷον ἀνθρώπον, ἀλλὰ μὴ τῶν ἄλλων τι ζώων, εἴτα καὶ ποιόν τινα τὸ σῶμα καὶ τὴν ψυχὴν. *Eth. Nic.* vi. 13.

development, the age of manhood, that man can live virtuously; for a child cannot possess moral virtue.<sup>16</sup> As now, Aristotle in his logic made the rational intelligence to be intimately connected with the physical condition of the sensations and conceptions, he must, in consistency, make the moral insight also to be dependent on the humours of the body and the outward influences of climate.<sup>17</sup> This view, in opposition to the Socratic doctrine, and, partly also, to the Platonic, Aristotle supports by many arguments. He shows that the distinction between virtue and science lies in this, that, while science is cognisant of opposites both good and evil, virtue is conversant only of the one, and not of its contrary.<sup>18</sup> Similarly the difference between practical and theoretical sciences consists in this,—that the latter investigate merely what is, whereas the former have also to ascertain how, and by what means, a particular object may be accomplished. The case is the same with ethics; we prosecute the study of morality, not simply with a view to certify ourselves what fortitude and justice are, but we wish, by means of it, to become hardy and just.<sup>19</sup> This distinction, however, was neglected by Socrates, in consequence, either of his confining his labours to the discovery of what virtue is, without attempting to ascertain by what it is produced; or from an opinion that virtue follows from knowledge, making the soul to exist only for reason, and disre-

<sup>16</sup> The child cannot *παρρεῖν*, only the man. Eth. Nic. i. 10; Eth. Eud. ii. 1, 8.

<sup>17</sup> De Part. An. ii. 4; Pol. vii. 7; Probl. xiv. 15.

<sup>18</sup> Eth. Nic. v. 1; Magn. Mor. i. 7.

<sup>19</sup> Eth. Nic. ii. 2; x. 10; Eth. Eud. i. 5; Magn. Mor. i. 1.

garding that part of it which reflects upon the practical. In short, he neglected whatever is accomplished by sentiment and habit (*πάθος καὶ ἥθος*).<sup>20</sup> Hence originated the opinion of Socrates, that man only involuntarily transgresses; from which it would necessarily follow, that men are not responsible for their faults. Man, however, possesses a principle of intelligence, and is a free and voluntary agent in the good or evil that he does.<sup>21</sup> If it should be said that all men pursue what appears good to them, and that they are not masters of their conception of good, the answer is direct, that by their moral conduct they have and may exercise power over the imagination. It is true, that they have no power over their conduct when they have already become virtuous or vicious; but still they have an authority over themselves while as yet their moral character is unformed, because it is only by actions that men acquire virtue or vice; and, therefore, they have in themselves the ground of either, in the same manner that he who has thrown a stone has it no longer in his power, though, indeed, while he is in the act of flinging it, he has still power over it. On this ground Aristotle justifies the punishment of those who act wrongly even in ignorance, whenever their ignorance is their own fault.<sup>22</sup> Aristotle proceeds, however, to refute still more completely this doctrine of Socrates, that man can only err involuntarily, by an analysis and examination of consciousness. In the first place, knowledge may be possessed in two different ways;

<sup>20</sup> Magn. Mor. i. 1.<sup>21</sup> Eth. Eud. ii. 8.<sup>22</sup> Eth. Nic. iii. 7.

either when a man has indeed learned or discovered, but is without the activity of consciousness; or when he also exerts this activity. Now it is surely impossible for a man to have this activity of consciousness, and to know what is good, but, nevertheless, to act contrary thereto; for the present knowledge cannot be overpowered by aught else; but, on the other hand, it is in nowise impossible for him to act contrary to knowledge, when, in truth, he has merely learned it, or recognised its truth, but, nevertheless, has it not present before him. Secondly, a similar distinction must be drawn between a knowledge of good in general, and a knowledge of the particular; for, as before observed, the mode in which the action is determined, resembles the method of reasoning; setting out from a knowledge of general good, by means of a knowledge of some particular good, we draw a conclusion for the case before us, that it is right to pursue this particular good. Now a man may very well be aware what is good in general, without knowing what is specially good for the present case; nay, he may even possess both species of knowledge without their exerting a practical influence upon his mind, and, in all such cases, he will transgress, and, at the same time, not be completely ignorant.<sup>23</sup> In this manner does Aristotle, deviating essentially from the principle of the Socratic doctrine, endeavour to refute its extravagant results. It is only imperfectly that he conceives the idea of science in its highest import, and

<sup>23</sup> Eth. Nic. vii. 6; Magn. Mor. ii. 6.



considers this to be necessary, because, in practice, the question is not supreme science, but rather the determination of what is to be done in certain occasions, which present themselves to experience, and which, as belonging to sensation, may be easily overborne by the passions or emotions of the soul.<sup>24</sup>

There is, however, another aspect on which the doctrine of Aristotle appears to stand out, still more sharply, in opposition to the Socratic. For, whereas Socrates maintained that virtue may be learned, Aristotle insisted so strongly on the necessity of combining practice with theory,<sup>25</sup> as even to assert that, without practice, a knowledge of it is impossible. He, who would study politics, must possess good morals, for all knowledge proceeds from the *ᾧτι*—the already existing; and whoever, consequently, has had no experience of good morals, can learn neither them nor the principles on which they rest.<sup>26</sup> All instruction in the nature of good, in order to be profitable, ought to be preceded by legal training to good habits.<sup>27</sup> In this regard Aristotle distinguishes between two species, or rather two elements of virtue,—the merely habitual (*ἡθικὴ*), and the intellectual (*διανοητικὴ*). When the former is conceived separately from the latter, it indicates nothing beyond a good natural

<sup>24</sup> Ll. 11. ; Eth. Nic. vii. 5 fin. οὐ γὰρ τῆς κυρίως εἶναι δοκούσης ἐπιστήμης παρούσης γίνεται τὸ πάθος, οὐδ' αὐτὴ περιέλκεται διὰ τὸ πάθος, ἀλλὰ τῆς αἰσθητικῆς.

<sup>25</sup> Eth. Nic. i. 10 ; x. 10.

<sup>26</sup> Ib. i. 2 fin. διὸ δεῖ τοῖς ἔθουσιν ἡχθαι καλῶς τὸν περὶ καλῶν καὶ δικαίων καὶ ὅλων τῶν πολιτικῶν ἀκουσόμενον ἱκανῶς. ἀρχὴ γὰρ τὸ ᾧτι. — ὁ δὲ τοιοῦτος ἡ ἔχει ἢ λάβοι ἀν ἀρχὰς ῥαδίως. Ib. x. 10. τοῦ δὲ καλοῦ καὶ ὡς ἀληθῶς ἡδέος οὐδ' ἔγνωις ἔχουσιν ἀγενστοὶ ὄντες.

<sup>27</sup> Ib. x. 10.

disposition or its improvement by practice. Still this habitual virtue, and that of practical knowledge, are equally indispensable to perfect virtue ; and their mutual relation is such, that, without virtue in the practical knowledge, a man cannot be good ; but, without the virtue of habit, he cannot possess that of practical knowledge.<sup>38</sup> Accordingly, the virtue of habit must precede that of practical knowledge, as knowledge does perfect virtue. To this distinction Aristotle reduces the famous question, whether there are one or many virtues. For there are many virtues of nature, since it is necessary to distinguish the natural impulses to good, which are not all equally influential ; on the other hand, perfect virtue is simply one, as being grounded solely in practical knowledge of good ; and, consequently, without this virtue no one can be truly virtuous.<sup>39</sup> But how can any man practice that which is not present to him ? To resolve this difficult question Aristotle directs attention to the practice of the arts. By a practice of building and of music, we become architects and musicians. There is truly a difference between artistic and moral practice, inasmuch as in the former, the art itself exists already, whereas in the latter, such is not the case with true virtue ; which, in addition to the right action, requires both a rational insight, and the intention of doing the good for the good's sake ; and lastly, also, a firm and unshaken confidence in the rectitude of the conduct pursued, while acting,

<sup>38</sup> Ib. vi. 13. οὐχ οἶόν τε ἀγαθὸν εἶναι κυρίως ἄνευ φρονήσεως, οὐδὲ φρόνιμον ἄνευ τῆς ἠθικῆς ἀρετῆς.

<sup>39</sup> L. I.

which confidence can only be acquired by a repeated exercise of morality.<sup>30</sup> Nevertheless, the affinity which subsists between artistic and moral practice, sufficiently explains how it is possible to perform virtuous actions in the absence of virtue itself. The acts of both have a common origin in a principle more extensive than either, and which, consequently, cannot be of an ethical, but is of a physical nature. They both spring from a natural faculty, which impels man to activity. He is, in the first instance, disposed to practise such acts, because, by nature, he instinctively strives to accomplish his allotted task; for nature and virtue are the best and most accurate arts;<sup>31</sup> and when a man has often practised them, he acquires the habit, and thereby the ground, of virtuous constancy; for what is often practised becomes natural.<sup>32</sup> Hence it is that, originally, we have our virtuous or our vicious dispositions in our power; but as soon as they are formed either to virtue or to vice, we are no longer able to control them. It is by three things, therefore,—nature, habit, and reason, that man becomes good.<sup>33</sup>

The difference between this view and that of Socrates lies mainly in this, that Aristotle makes the development of the reason to be dependent on a previous development of nature, and, conse-

<sup>30</sup> Eth. Nic. ii. 3.

<sup>31</sup> Ib. c. 6. ἡ δὲ ἀρετὴ πάσης τέχνης ἀκριβεστέρα καὶ ἀμείνων ἐστίν, ὥσπερ καὶ ἡ φύσις.

<sup>32</sup> Ib. c. 1. οὐτ' ἄρα φύσει οὔτε παρὰ φύσιν ἐγγίνονται αἱ ἀρεταί· ἀλλὰ πεφυκότες μὲν ἡμῖν διέξασθαι αὐτάς, τελειοῦμένοις δὲ διὰ τοῦ ἔθους. De Mem. 2. ὥσπερ γὰρ φύσις ἤδη τὸ ἔθος — τὸ δὲ πολλάκις φύσιν ποιεῖ.

<sup>33</sup> Pol. vii. 13. ἀλλὰ μὴν ἀγαθοί γε καὶ σπουδαῖοι γίνονται διὰ τριῶν· τὰ τρία δὲ ταῦτά ἐστι φύσις, ἔθος, λόγος.

quently, does not set the moral in so strong a contrast to the natural as Socrates does. Consequently, the moral conduct does not appear to Aristotle to be so much a consequence of the moral enlightenment, as the latter of the former. And it was only a natural consequence of this, that he should look upon the influence of precept, education, and a right knowledge of good, as very inconsiderable.

As, now, with Aristotle, the ethical stood in such close affinity to the physical, he naturally felt the necessity of determining, by a more proximate distinction of the two, their respective limits. With this view, he observes that virtue and vice are the only objects of moral appreciation; that both vice is to be distinguished from brutishness (*θηριότης*), and virtue from the divine mode of action, which is more than virtue.<sup>34</sup> This evidently implies that ethics, properly, are only conversant about man; but not universally, since there are many human actions which are not subject to moral appreciation. Thus he considers the brute pleasures, which he supposes to exist among barbarians, to be an inevitable consequence of their social state, and ascribes to diseases and mal-organisation many similar phenomena; and regards immoderate fear, and the cruel pleasures of a Phalaris, as consequences of nature, and therefore as not subject to the moral estimate.<sup>35</sup> This is still more strongly shown in his distinction between temperance (*ἐγκράτεια*) and virtue, and between intemperance (*ἀκρασία*) and vice;

<sup>34</sup> Eth. Nic. vii. 1; Magn. Mor. ii. 4, 5.

<sup>35</sup> Eth. Nic. vii. 6.

for as virtue and vice do not seem to lie without the domain of humanity, they appear to be the more easily subjected to the moral estimate. To this distinction, however, he was principally led by the consideration, on the one hand, of those mental states in which the reason, at one time, is not master of the passions; and, on the other, of those in which it exerts its authority over bad desires. Such states, according to Aristotle, are better than vice, worse than virtue; for, in intemperance, the principle of virtuous conduct, reason, is not quite destroyed, and consequently the intemperate man feels sorrow for his misdeeds: while the temperate man is inferior to the perfectly virtuous in so far as his evil propensities are not entirely extinct.<sup>36</sup> To this class Aristotle assigns all moral weakness or effeminacy, as well as the obstinacy which never abandons a resolution once taken, and also an overhasty disposition; and denies that a moral standard exists for these. Aristotle evidently circumscribes too narrowly the domain of ethics, absolutely denying to the youth of man all meritorious virtue, because at this age the reason is not fully matured. We cannot but observe that, according to this view, the imperfect and invisible beginnings of morality are placed far out of the

\* Eth. Nic. vii. 11. ὁ τε γὰρ ἐγκρατὴς οἷος μηδὲν παρὰ τὸν λόγον διὰ τὰς σωματικὰς ἡδονὰς ποιεῖν καὶ ὁ σώφρων· ἀλλ' ὁ μὲν ἔχων, ὁ δ' οὐκ ἔχων, φάλας ἐπιθυμίας· καὶ ὁ μὲν τοιοῦτος οἷος μὴ ἡδεσθαι παρὰ τὸν λόγον, ὁ δ' οἷος ἡδεσθαι, ἀλλὰ μὴ ἀγισθαι. Ib. c. 9. οὗτός ἐστιν ὁ ἀκρατὴς βελτίων τοῦ ἀκολάστου, οὐδὲ φαῦλος ἀπλῶς. σώζεται γὰρ τὸ βέλτιστον, ἡ ἀρχή. Ib. 8; Magn. Mor. ii. 6. Aristotle is somewhat inaccurate when he occasionally calls temperance (ἐγκράτεια) a virtue, and intemperance (ἀκρασία) a vice; Eth. Eud. ii. 7. In general there is a great want of precision in these disquisitions.

domain of ethics, and, consequently, it incurs the peril of making the perfect reason of the moral man a product of some antecedent which is not itself moral. This procedure of Aristotle is, however, strictly consonant with the general direction of his philosophy. For as he set out with the object of explaining whatever is most distinctly perceptible in experience, he was naturally disposed to confine his investigations of virtue to those cases in which it presents itself obviously and markedly; but to refer its more imperceptible beginnings to another province of inquiry.

It is necessary to follow this direction a little further, and to determine the general form by which Aristotle distinguished the moral from the physical. To begin with the latter;—these limits he made to consist in the notions of that which is performed merely by means of some passive state or passion (*πάθος*), and of that which is the result of some habit already formed (*ἥθος*). The former is simply physical, the latter moral. Accordingly he opposes a life obedient to these passive states, or sensuous impressions and impulses, to the moral life.<sup>37</sup> By passive state Aristotle understands, in a moral sense, every direction of mind which pursues pleasure or pain; viz. desire, anger, fear, even love, hatred, covetousness, compassion, envy, and so forth.<sup>38</sup> Such feelings (if we may use this expression) are neither meritorious nor culpable, since

<sup>37</sup> Eth. Nic. x. 10, and elsewhere.

<sup>38</sup> Ib. ii. 4. λέγω δὲ πάθη μὲν ἐπιθυμίαν, ὀργήν, φόβον, θράσος, φθόνον, χαράν, φιλίαν, μῖσος, πόθον, ζήλον, ἔλεον, ὕλως οἷς ἕπεται ἡδονή ἢ λύπη. Eth. Eud. ii. 2, 4; Magn. Mor. i. 7.

they do not render a man either good or bad; and therefore are not objects of the moral appreciation. The irresponsibility of these states follows also from the consideration, that we arrive at them without design on our parts, and that they are emotions but not modes of our souls.<sup>39</sup> Nevertheless, virtue is most closely connected with them; for man's position relatively to them is far from being morally indifferent, since he may be without the right measure in fear and boldness, desire and compassion, pleasure and pain.<sup>40</sup> It is here taken for granted that man can control his passions, and can at times either repress or excite them, or at least moderate them. It is clear, nevertheless, how fallible a business it must be to determine the precise point where the moderation of the passions must commence, and where their grosser nature, as yet uncorrected by reason, terminates. On this account, Aristotle has thought it advisable to subjoin to his disquisitions upon those virtues which are most nearly dependent on the passions, some remarks upon their control, which, in his view, is nearly related to virtue itself, but, nevertheless, must not be confounded with it. Among these he enumerates shame, love of justice (*νέμεσις*), which represses both envy and malice; love, which is intermediate between enmity and obsequiousness; self-esteem, which is neither too high-minded nor too condescending; a simple love of truth, and many other sentiments of like kind,<sup>42</sup> of which, in

<sup>39</sup> Li. II.

<sup>40</sup> Eth. Nic. ii. 5; Eth. Eud. ii. 2; Magn. Mor. i. 8.

<sup>41</sup> Eth. Eud. iii. 7 in. *μεσότητες παθητικαί*.

<sup>42</sup> Eth. Nic. iv. 15; Eth. Eud. iii. 7; Magn. Mor. i. 27—33.

truth, it is difficult to say how Aristotle could have failed to perceive the moral value, if we did not recognise herein his tendency to confine morality to the narrow sphere of a merely human development.

This, then, according to Aristotle, is the relation of the moral to the physical; and from it, it is easy to perceive the nature of the connection which he supposed to exist between it and the logical. Physical virtue arises, by means of practice, out of certain passive states, and the habit thence arising; and then moral virtue attaches itself to the physical, as soon as the rational practical knowledge accedes to habit. But this practical knowledge is formed in the same manner as the scientific. It is produced, as we formerly saw, in the form of an argumentation; aversion and desire are a negation and an affirmation.<sup>43</sup> In the same manner that science arises from oft-repeated experiments, the thoughts gradually arriving thereby at stability and definiteness, so a correct practical insight is formed by the repetition of right acts, during which the inconsistent conduct originally dependent upon and determined by the sensuous impression, ultimately attains to a fixed habit.<sup>44</sup>

The more intimate the alliance of the practical

<sup>43</sup> Eth. Nic. vi. 2.

<sup>44</sup> Ib. c. 12. *ἐκ τῶν καθ' ἕκαστα γὰρ τὸ καθόλου. τούτων οὖν ἔχειν δεῖ αἰσθῆσιν αὐτῇ δ' ἐστὶ νοῦς. διὸ καὶ φυσικὰ δοκεῖ εἶναι ταῦτα· καὶ φύσει σοφὸς μὲν οὐδεὶς, γνῶμην δ' ἔχει καὶ σύνεσιν καὶ νοῦν. σημεῖον δ' ὅτι καὶ ταῖς ἡλικίαις οὐκ ἔστι ἀκολουθεῖν. καὶ ἤδη ἡ ἡλικία νοῦν ἔχει καὶ γνῶμην ὡς τῆς φύσεως αἰτίας οὐσης. διὸ καὶ ἀρχὴ καὶ τέλος νοῦς. ἐκ τούτων γὰρ αἱ ἀποδείξεις καὶ περὶ τούτων. ὥστε δεῖ προσέχειν τῶν ἐμπειρῶν καὶ πρῶτον βυτίρων ἢ φρονίμων ταῖς ἀναποδείκτοις φάσεσι καὶ δόξαις οὐχ ἥττον τῶν ἀποδείξεων· διὰ γὰρ τὸ ἔχειν ἐκ τῆς ἐμπειρίας ὁρᾶσι ὁρθῶς.*



intellect and the theoretic reason is made by this doctrine, the more surprising it is to find Aristotle excluding the scientific activity from the sphere of ethical investigation. The procedure, however, is the same here as in the case of physical virtue. For while the physical virtues are withdrawn from the sphere of morals, simply because they are not peculiar to man, but are inferior to the human development, wisdom, or reason, or science,<sup>45</sup> as far transcending man's capacity, is excluded from the proper domain of his activity. It is true that Aristotle regards it as a virtue,<sup>46</sup> but a life of wisdom is beyond any life in human wise, and it is not simply as men that we live wisely, but as men in whom something divine resides.<sup>47</sup> As, then, ethics or politics, are exclusively occupied with man, they cannot, in the strict acceptation, have to do with wisdom; nevertheless, as wisdom is a virtue, and, like other virtues, exists in the soul; and as the philosopher ought to neglect nothing that is found in combination with his proper object, the investigation into the nature of wisdom is, incidentally, necessary to ethics.<sup>48</sup> Thus does Aristotle justify

<sup>45</sup> Magn. Mor. i. 35; Eth. Nic. vi. 7. ὥστ' εἴη ἀν' ἡ σοφία νοῦς καὶ ἐπιστήμη καὶ ὥσπερ κεφαλὴν ἔχουσα ἐπιστήμη τῶν τιμιωτάτων.

<sup>46</sup> Magn. Mor. i. 1.; Rhet. i. 9; Eth. Nic. i. 13 6n.; Eth. Eud. ii. 1. There is apparently an inconsistency herewith in Magn. Mor. i. 5.

<sup>47</sup> Eth. Nic. x. 7. ὁ δὲ τοιοῦτος ἀν' εἰς κρείττων βίος ἢ κατ' ἀνθρώπον· οὐ γὰρ ᾗ ἀνθρωπός ἐστιν, οὕτω βιώσεται, ἀλλ' ᾗ θεῖόν τι ἐν αὐτῷ ὑπάρχει.

<sup>48</sup> Magn. Mor. i. 34. ἀπορήσεις δ' ἂν τις καὶ θαυμάσειε, διὰ τί ὑπὲρ ἡθῶν λέγοντες καὶ πολιτικῆς τινὸς πραγματείας, ὑπὲρ σοφίας λέγομεν. ὅτι ἴσως γε πρῶτον μὲν οὐτ' ἀλλοτρία δόξειεν ἀν' εἶναι ἢ σκέψις ἡ ὑπὲρ αὐτῆς, εἴπερ ἐστὶν ἀρετὴ, ὥς φαμν· ἔτι δ' ἴσως ἐστὶ φιλοσόφου καὶ περὶ τούτων παρεπισκοπεῖν, ὅσα ἐν τῷ αὐτῷ τυγχάνουσιν ὄντα· καὶ ἀναγκαῖον δέ, ἐπεὶ περὶ τῶν ἐν ψυχῇ λέγομεν, περὶ ἀπάντων λέγειν· ἔστι δὲ καὶ ἡ σοφία ἐν ψυχῇ. ὥστε οὐκ ἀλλοτρίως ὑπὲρ ψυχῆς ποιούμεθα τοὺς λόγους.

himself for speaking of wisdom in his Ethics, although it is only as of a foreign matter that he treats of it, and introduces these inquiries, like those concerning physical virtue and vice, merely for the purpose of determining the proper limits of ethics.

High enough, however, is the place which Aristotle assigns to wisdom, or the theoretic virtue of the soul. He expressly declares that all other virtues exist only for the sake of wisdom. He shows that the activity of the most perfect part of the soul, i. e. the reason, must ever be the most perfect activity, and that, therefore, it ought to be the first object of man's endeavours. It affords, moreover, the most stable felicity, since man can pursue truth more steadily and uninterruptedly than any object of practical activity. The contemplation of truth affords the highest, the purest, and the most certain pleasures, and a speculative life insures, at least, independence. For contemplation is possible even in solitude, whereas an active life requires society for its sphere of action. Moreover, a speculative life is loved for its own sake, whereas every act is undertaken solely with a view to something beyond it. Lastly, felicity consists mainly in leisure, and this belongs to a contemplative life alone; whereas, in practical and political life, as man's energies are unceasingly exerted, and as they pursue some ulterior object, they are not chosen solely for their own sakes.<sup>49</sup> In perfect harmony with

<sup>49</sup> Eth. Nic. x. 7. δοκεῖ δὲ ἡ εὐδαιμονία ἐν τῇ σχολῇ εἶναι· ἀσχολούμεθα γάρ, ἵνα σχολάζωμεν. — εἰ δὲ τῶν μὲν κατὰ τὰς ἀρετὰς πράξεων αἱ πολιτικαὶ καὶ πολεμικαὶ κάλει καὶ μεγίσται· προέχουσιν· αὗται δὲ ἀσχολοὶ καὶ

this remark is the doctrine that every well-constituted state ought to secure to its citizens sufficient leisure for the cultivation of philosophy;<sup>50</sup> and that the best and most desirable possession is that of those natural endowments which impel a man to the contemplation of the Deity.<sup>51</sup> Aristotle compares the relation of the practical insight to wisdom, with that of a steward to his master. In the same way that the former ought to take care that all necessary things are provided in the house, in order that the master may find leisure to contemplate the beautiful and good; so the practical insight ought diligently to direct all necessary action, and duly to regulate the passions, in order that wisdom may have leisure to accomplish its task.<sup>52</sup> This strongly expresses Aristotle's preference for a speculative life; since the practical is only of value as a means for the scientific improvement.

This, however, only increases our astonishment to find that his whole ethical view was not directed to this end, and consequently assumed a very dif-

*τίλους τινὸς ἐφίενται καὶ οὐ δι' αὐτάς εἰσιν αἰρεταί· ἡ δὲ τοῦ νοῦ ἐνέργεια σπουδῇ τε διαφέρειν δοκεῖ θεωρητικῇ οὐσα καὶ παρ' αὐτὴν οὐδενὸς ἐφίσθαι τίλους ἔχειν τε ἡδονὴν οἰκίαν. — εἰ δὲ θεῖον ὁ νοῦς πρὸς τὸν ἀνθρώπον καὶ ὁ κατὰ τοῦτον βίος θεῖος πρὸς τὸν ἀνθρώπινον βίον. χρὴ δὲ οὐ κατὰ τοῦς παραινοῦντας ἀνθρώπινα φρονεῖν ἀνθρώπον ὄντα, ἀλλ' ἐφ' ὅσον ἐνδέχεται ἀπαθανατίζειν καὶ ἅπαντα ποιεῖν πρὸς τὸ ζῆν κατὰ τὸ κράτιστον τῶν ἐν αὐτῷ· εἰ γὰρ καὶ τῷ ὀγκῷ μικρὸν ἐστὶ, δυνάμει καὶ τιμότητι πολὺ μᾶλλον ὑπερίχει πάντων.*

<sup>50</sup> Polit. vii. 14, 15.

<sup>51</sup> Eth. Eud. vii. 15 fin. ἥτις οὖν αἵρεσις καὶ κτῆσις τῶν φύσει ἀγαθῶν ποιήσει τὴν τοῦ θεοῦ μάλιστα θεωρίαν, ἡ σώματος ἡ χρημάτων ἡ φίλων ἡ τῶν ἄλλων ἀγαθῶν, αὕτη ἀρίστη καὶ οὗτος ὁ ὕρος κάλλιστος.

<sup>52</sup> Magn. Mor. i. 35 fin. οὕτω καὶ ὁμοίως τούτῳ ἢ φρόνησις ὥσπερ ἐπιτροπὸς τίς ἐστι τῆς σοφίας καὶ παρασκευάζει ταύτην σχολὴν καὶ τὸ ποιεῖν τὸ αὐτῆς ἔργον, κατέχουσα τὰ πάθη καὶ ταῦτα σωφρονίζουσα.

ferent form from the present, in which the theoretic life is only subordinately noticed, and its development left untraced, without any attempt to show in what manner this end is pursued in all the bearings of practical life. The reasons which he adduces for this limitation of ethical inquiry, are far from satisfactory. He subdivides the rational part of the soul into two parts, one of which is engaged about the necessary, whereas the other is occupied about the contingent.<sup>53</sup> The latter alone is the object of moral deliberation, since no one deliberates upon that which cannot be otherwise than as it is: therefore, as science and wisdom are conversant solely about the necessary, they cannot possibly be matters of moral investigation.<sup>54</sup> It is clear that Aristotle here forgets that even admitting that the scientific activity relates only to the necessary and the eternal, in the human mind it is, nevertheless, only potential; and that, consequently, the question arises, how, and in what manner, the individual ought to engage in it. On the other hand, the general view which Aristotle took of ethics, furnished to his mind, no doubt, sufficient reasons for considering the scientific activity merely as the limits of the moral. For the context of his doctrine makes it clear that he intended to confine his ethical investigations to whatever, emanating from our inner rational activity, terminates in some outward act. For this reason, he looked upon

<sup>53</sup> Eth. Nic. vi. 2. τὸ ἐπιστημονικὸν and τὸ λογιστικόν.

<sup>54</sup> L. 1. οὐθεὶς δὲ βουλευέται περὶ τῶν μὴ ἐνδεχομένων ἄλλως εἶχειν. Ib. c. 13. ἡ μὲν γὰρ σοφία οὐθὲν θεωρεῖ, ἐξ ὧν ἔσται εὐδαιμόνων ἄνθρωπος· οὐδεμιᾶς γὰρ ἔστι γενέσεως.

ethics as a part of politics, and consequently made its object to be the outward and not the inward development of the reason. His ethical system is thus doubly limited. For, on the one hand, all human labours which do not aim directly at some inward development, but have for their object some external work, notwithstanding that they fall within the proper sphere of the practical reason,<sup>55</sup> as well as those internal developments of the soul which are the bases of the fine arts, even though they may be useful, as tending to exalt and purify the passions and emotions of the soul, are hereby excluded from all moral appreciation.<sup>56</sup> On the other hand, the investigation of the scientific development is withdrawn from ethics. All these limitations of the sphere of ethics result naturally from Aristotle's view of human life. The life of man is not only destined, like that of the brutes, to gratify its wants by outward works, but is no more capable than the brutes of attaining to divine perfection. Man constitutes but a small, and, on the whole, an insignificant portion of the world, even in this little and sublunary sphere; it is, therefore, only in a small degree that he can appropriate the divine, and he must be content with practical life as the proper sphere of his activity.

This defect of Aristotle's ethics in only partially occupying itself with man's rational improvement, quickly entails its own penalty, and is the source of his vagueness and uncertainty when he proceeds

<sup>55</sup> Eth. Nic. vi. 2. αὕτη γὰρ (sc. πρακτικὴ διάνοια) καὶ τῆς ποιητικῆς ἀρχει.

<sup>56</sup> De Arte Poet. 6.

to determine the relation of ethics to science. Thus, on the one hand, as he makes practical life to comprise the whole domain of morality, he must necessarily look upon practical good as the good which is performed for its own sake alone. This is the leading view of his ethical theory. The practical activity is distinguished from the artistic by this,—that it has no end beyond itself.<sup>57</sup> The practical intelligence ought to be chosen solely for its own sake ;<sup>58</sup> the realisation of the good and the beautiful ought to be the first and last object of all man's endeavours.<sup>59</sup> But, on the other hand, we formerly saw that whenever the practical comes into competition with the scientific development, Aristotle follows his natural bias, and makes the value of the former to consist mainly in its being a mean to the latter.

This is the point of view from which Aristotle contemplates all morality. If this is once fully seized, there will be little difficulty in the details of his theory. These may be reduced to a few simple ideas, and, on the whole, strongly evince the moderation of the man, and his aversion for all exaggeration, as is chiefly shown in the care with which he strove to take as complete and comprehensive a view as possible of the several elements of human conduct, so far as they were exhibited in his own age and nation. His investigations, how-

<sup>57</sup> Eth. Nic. vi. 2. *ἡ γὰρ εὐπραξία τέλος. Poet. 6. τὸ τέλος πράξις τίς ἐστιν.*

<sup>58</sup> Eth. Nic. vi. 13.

<sup>59</sup> Eth. Nic. x. 6. *τὰ γὰρ καλὰ καὶ σπουδαῖα πράττειν τῶν ἐν' αὐτὰ αἰρετῶν.*

ever, turn chiefly upon two principal notions, which the ethical system of Plato had largely developed—that of moral good, and that of virtue. The former justly stands at the very head of his ethical researches.

All arts pursue some good; some things, however, are only good and desirable as means for the attainment of others; there must, therefore, be some ultimate good which is pursued solely for its own sake;—the good absolutely, or the best; for, otherwise, man's efforts would proceed without end, and his desire would be void and in vain.<sup>60</sup> If, however, he would regulate his actions by the standard of good, he will seek not after the good absolutely, but human good merely, or the good which is attainable by man.<sup>61</sup> In name, at least, all men are agreed as to this object of human pursuit, and call it happiness;<sup>62</sup> but what happiness is, is a much disputed point. To decide this question, Aristotle adduces certain characteristics which are involved in the notion of supreme good. The supreme good is something perfect; now that which is desired for its own sake is more perfect than that which is desired for the sake of something else.<sup>63</sup> The perfect good is also something self-sufficient; now that is all-sufficient which, of itself,

<sup>60</sup> Eth. Nic. i. 1. *εἰ δὴ τι τέλος ἐστὶ τῶν πρακτικῶν, ὃ δι' αὐτὸ βουλόμεθα, τὰ ἄλλα δὲ διὰ τοῦτο, καὶ μὴ πάντα δι' ἕτερον αἰρούμεθα (πρόεισι γὰρ οὕτω γ' εἰς ἅπειρον, ὥστ' εἶναι κενὴν καὶ ματαίαν τὴν ὁρεξιν)*. δῆλον ὡς τοῦτ' ἂν εἴη τάγαθόν καὶ τὸ ἀριστον.

<sup>61</sup> L. 1. *τὸ ἀνθρώπινον ἀγαθόν*. Ib. 2. *τὸ πάντων ἀκρότατον τῶν πρακτικῶν ἀγαθόν*. Ib. c. 4.

<sup>62</sup> Eth. Nic. i. 2; Eth. Eud. i. 1; Magn. Mor. i. 2.

<sup>63</sup> Eth. Nic. i. 5.

and apart from everything else, makes life desirable, and supplies all its wants; this, however, is only possible where no further accession of good is possible.<sup>64</sup> Here, however, nothing more is meant by felicity, and all-sufficiency, than as near an approximation thereto as man is capable of. Of this Aristotle reminds us by making this all-sufficiency to be unattainable in solitude, because man is a political being;<sup>65</sup> but still more, by his arriving, in the course of his investigations, to the conclusion that man must regard the work of whatever works and acts, and consequently of man also, as his good. But in his attempt to establish this good, he excludes whatever is common to man and other animals, and maintains that man's happiness consists solely in accomplishing his appropriate task. Consequently, not only the nutritive and sensitive, but also the speculative reason, have no part in this, for the former are common to man with the brutes, and the latter with the gods. It is only in the practical activity of the soul, which proceeds with reason, that the work and happiness of man consist.<sup>66</sup> In order that happiness may be

<sup>64</sup> L. 1. τὸ γὰρ τέλειον ἀγαθὸν αὐταρκὲς εἶναι δοκεῖ — τὸ δ' αὐταρκὲς τίθεμεν, ὃ μονούμενον αἰρετὸν ποιεῖ τὸν βίον καὶ μηδεὶνδ' ἰνδεῖν. — *Ἐπὶ δὲ πάντων αἰρετωτάτην (τὴν εὐδαιμονίαν) μὴ συναριθμουμένην. The following passage, Magn. Mor. i. 2, assists us to determine the sense of συναριθμουμένην. τὴν δ' εὐδαιμονίαν ἐκ πολλῶν ἀγαθῶν συντίθεμεν. ἰδὼν δὲ τὸ βέλτιστον σκωπῶν καὶ αὐτὸ συναριθμῆς, αὐτὸ αὐτοῦ ἔσται βέλτιστον. — τὸ δ' ἐξ ὧν ἀγαθῶν συγκρίνεται σκοπεῖν εἰ τοῦτ' ἔστι βέλτιστον, ἀποπον' οὐ γὰρ ἔστιν ἄλλο τι χωρὶς τούτων ἢ εὐδαιμονία.* <sup>65</sup> L. 1.

<sup>66</sup> The activity of the speculative reason is not expressly excluded by Aristotle; on the contrary, it would appear from Eth. Nic. i. 13; x. 7, to be a constituent of human happiness; nevertheless, the constant reference of happiness to πράττειν, and the πολιτικὸς βίος, sufficiently authorises the view in the text, which is not everywhere maintained, solely by reason of the looseness



complete, it must exist in a perfect activity, and in a perfect life. By perfect life Aristotle understood two things,—the development of life to the highest grade of perfection, and the consistency of the practical activity from its beginning to its close. For, on the one hand, no one will esteem youth as happy, except, perhaps, in anticipation of his future destiny of manhood; on the other, one swallow does not make a summer, and one happy day does not constitute a happy life; and the saying of Solon is not without truth, that we must wait till a man's death before we call him happy.<sup>67</sup>

This, however, does but reveal the vagueness of Aristotle's idea of happiness. He was, in fact, unable to determine the perfect time during which the perfect activity is to last; in his mind it merely stood for the greater portion of life. He could not even require that this happiness should be unbroken through the whole activity of life, since exhaustion and rest must constantly intervene, and, consequently, one half, at least, of life is a state negatively unhappy;<sup>68</sup> not to mention the many impediments thereto arising from unforeseen circumstances.<sup>69</sup> From this it must also be clear that

of Aristotle's language. Compare Eth. Nic. i. 6; x. 8. αἱ δὲ τοῦ συνθέτου (sc. ἐκ ψυχῆς καὶ σώματος) ἀρεταὶ ἀνθρωπικαὶ καὶ ὁ βίος δὴ ὁ κατ' αὐτάς καὶ ἡ εὐδαιμονία· ἡ δὲ τοῦ νοῦ κειχωρισμένη.

<sup>67</sup> Eth. Nic. i. 10, 11; Eth. Eud. ii. 1; Magn. Mor. i. 4. ἔπει οὖν ἐστὶν ἡ εὐδαιμονία τέλειον ἀγαθὸν καὶ τέλος, οὐδὲ τοῦτο δεῖ λανθάνειν, ὅτι καὶ ἐν τελείῳ ἐσται· οὐ γὰρ ἐσται ἐν παιδί —, ἀλλ' ἐν ἀνδρί· οὗτος γὰρ τέλειος· οὐδ' ἐν χρόνῳ γε ἀτελεῖ, ἀλλ' ἐν τελείῳ· τέλειος δ' ἂν εἴη χρόνος, ὃν ἀνθρώπος βιοῖ· καὶ γὰρ λίγεται ὀρθῶς παρὰ τοῖς πολλοῖς, ὅτι δεῖ τὸν εὐδαιμονα ἐν τῷ μεγίστῳ χρόνῳ τοῦ βίου κρίνειν.

<sup>68</sup> Eth. Nic. i. 13. ὅθεν φασὶ οὐδὲν διαφέρειν τὸ ἡμῖσιν τοῦ βίου τοὺς εὐδαιμονας τῶν ἀθλίων. Magn. Mor. i. 4; Eth. Eud. ii. 1.

<sup>69</sup> Eth. Nic. x. 4. πάντα γὰρ τὰ ἀνθρώπεια ἀδυνατεῖ συνεχῶς ἐνεργεῖν.

Aristotle places the happiness of man, consistently with his nature, in the activity of the soul, and regards this as self-sufficient, but that he is nevertheless forced to regard his happiness as dependent on other kinds of good. Again ; we are forced to recognise in all this a wise moderation, which prevented him from placing man's happiness in any single and special good. Nevertheless, we must not, on the other hand, be deterred thereby from expressing our opinion that, seemingly, he regards the end of human endeavours as something which is not absolutely within the power of man, but as dependent upon contingent circumstances, and therefore incapable of being accurately defined. Aristotle adopts the division of the good things which are the principle of man's happiness into those of the soul, those of the body, and external things, and makes the latter two far from the least important. It is true he expresses an opinion, that outward things, in moderation, are sufficient,<sup>70</sup> and that the smaller good things of fortune do not render life happy ; that only great success or signal reverses materially influence the happiness of life. Still he holds that we stand in need of corporeal blessings, and of outward advantages, as means to happiness ; for it is impossible, or at least not easy, for a man's unassisted endeavours to arrive at distinction, since there is much that cannot be accomplished without the instrumentality of riches, and friends, and political influence. There are also other things, of which the absence or the want

<sup>70</sup> Eth. Nic. x. 9 in.

might cast a shade over our happiness; such as noble birth, beauty of form, and the blessing of children. Friendship and love are necessary to all men; even still more in joy than in sorrow; for in solitude man cannot live; he must have some one to benefit, one to whom he may impart and who may share his joys, whose love and affection he may enjoy.<sup>71</sup> The life of man, then, appears not to be independent, but, on the contrary, the perfection of its happiness depends upon a number of circumstances. As, now, Aristotle must have seen that no one would undertake any thing without the view of attaining to his proper end,<sup>72</sup> it was, in all probability, his intention to assume that those conditions which are not under man's control, but which, nevertheless, are essential to his happiness, necessarily present themselves from elsewhere, whenever no exertion on his own part is wanting. But even in this respect the statements of Aristotle are unsatisfactory. It is true he is of opinion that men who live rationally are pre-eminently dear to the gods, and are therefore the especial objects of their providence, receiving from them whatever of external and corporeal advantage is indispensable to their happiness;<sup>73</sup> but, on the other hand, he tells us that external and corporeal advantages are things of fortune, of which he hesitates to ascribe to the gods the dispensation, since they do not always fall to the share of the good and the de-

<sup>71</sup> Eth. Nic. i. 8, 9, 11; ix. 9, 11; Eth. Eud. ii. 1; Magn. Mor. i. 3; ii. 15; Polit. vii. 1.

<sup>72</sup> Met. ii. 2. *καίτοι οὐθείς ἂν ἐγχειρήσειεν οὐθέν πράττειν μὴ μίλλων ἐπὶ πίρας ἕξειν.*

<sup>73</sup> Eth. Nic. x. 9; cf. ib. i. 10.

serving; and he is consequently disposed to regard nature, which impels man unconsciously to the prosecution of good, as the ground and principle of happiness.<sup>74</sup> But, now, attending to the fact that nature does not always attain to her end, but occasionally falls short of it, we must fain confess that, according to Aristotle, the attainment of the means necessary to insure our happiness is far from certain. This is another instance of that indecision which was occasioned most probably by a too careful observance of what man's finite experience is competent to assert. And, although these wavering and inconsistent views may, in some measure, be excused by Aristotle's conviction that all investigations into the conditions of human conduct lie without the proper domain of ethical inquiry,<sup>75</sup> this excuse only makes more obvious his proneness to draw a marked boundary between the different branches of science, and so to keep them as distinct as possible. On this point we have further to remark, that the vagueness of Aristotle's notion of happiness seems to have resulted, in some measure, from his seeking a general end of human conduct, which man can attain to in his earthly existence; i. e. a something unreal and purely imaginary. If anywhere, here, undoubtedly, Aristotle ought to have extended his view beyond the narrow sphere of human experience.

While, however, as it appears to us, Aristotle

<sup>74</sup> Eth. Nic. vii. 14; Magn. Mor. ii. 8. *ἔστιν οὖν ἡ εὐτυχία λόγος φύσις δὲ γὰρ εὐτυχίας ἔστιν ὁ ἀνευ λόγου ἔχων ὁρμήν πρὸς τὰγαθὰ καὶ τούτων ἐπιτυχάνων.*

<sup>75</sup> Eth. Nic. i. 10 in.

has inadequately pointed out the necessary connection between the several elements which constitute human happiness, he is more successful in his attempt to join together, by an inward bond, the elements of which it ought to consist. With this view, he first proceeds to solve the olden dispute, whether happiness consist in reason or in pleasure. Accordingly, he distinguishes three modes of life, viz. the selfish, whose object is pleasure,—political, whose object is virtue,—and the scientific, whose end is knowledge; and despises the first as merely animal, but lauds the second as agreeable to man's nature, while he exalts the third beyond human attainment.<sup>76</sup> Still he treats of this matter somewhat superficially; for, that this division regards only corporeal pleasure, he himself distinctly intimates.<sup>77</sup> Generally, indeed, he does not make pleasure alone to be happiness; on the contrary, he says every pleasure is not desirable; and there are even evil pleasures.<sup>78</sup> Still we soon remark a strong propensity, on his part, to estimate highly the worth of pleasure, and we find him, not without a little warmth of zeal, denying that an incorrupt mind will give the name of pleasure to those enjoyments which the common voice of mankind condemns as base.<sup>79</sup> The same is also evident from his endeavour to explain the opposite view, which regards every species of pleasure as bad;

<sup>76</sup> Eth. Nic. i. 3; Eth. Eud. i. 4.

<sup>77</sup> Eth. Eud. l. 1. ὁ δ' ἀπολαυστικὸς περὶ τὰς ἡδονὰς τὰς σωματικὰς.

<sup>78</sup> Eth. Nic. vii. 13; x. 3, 5.

<sup>79</sup> Ib. x. 2, 5. τὰς μὲν οὖν ὁμολογουμένως αἰσχροὺς δῆλον ὡς οὐ φατίον ἡδονὰς εἶναι πλὴν τοῖς διεφθαρμένοις.

for, he says, the observation of the strong propensity of man to excessive indulgence, led to a recommendation of total abstinence, as the only means of insuring moderation. This course, however, is imprudent, since facts are opposed to words, which, consequently, receive no credit.<sup>80</sup> In opposition to this extreme view, he observes that the obstacle to virtue, which some find in pleasure, is only apparent, and that, contrariwise, its real tendency is good, since pleasure arises from the enjoyment of good; and, therefore, the pursuit of pleasure is a pursuit of good.<sup>81</sup> This alone can be rightly said,—that the pursuit of one particular pleasure is an obstacle to the attainment of another, since different good things cannot be enjoyed at the same time.<sup>82</sup> But from this it only follows, that man ought to distinguish the several kinds of pleasure into those which are to be rejected as impediments to others which are greater, and those which are to be chosen, notwithstanding that they necessarily exclude other, but inferior species of pleasure. This is proved by the difference between a friend and a flatterer; and the fact that, notwithstanding the general belief of the superior happiness of childhood, no one would really choose to be a child again; and, lastly, by the fact that many things are accounted desirable, even though unaccompanied by pleasure, viz. sight, memory, virtue, and wisdom. From all this it is clear, both that pleasure is not good itself, and

<sup>80</sup> Ib. c. 1.

<sup>81</sup> Ib. c. 5. συναύξει γὰρ τὴν ἐνέργειαν ἢ οἰκία ἡδονή.

<sup>82</sup> Ib. vii. 13; Magn. Mor. ii. 7.

that every pleasure is not desirable.<sup>83</sup> However, in order to distinguish true and apparent pleasure, it is necessary to consider the notion itself. With this view, Aristotle endeavours to refute the view of Plato, that pleasure is merely a transition-state, and opposes to it his own doctrine of energy. With Aristotle, pleasure is not a merely transient state, which itself cannot be an end of action, but it is an end, and an energy, i. e. an activity whose end is in itself, in every natural habit of mind, (*ἔξως*),<sup>84</sup> it is the unlimited energy; or, to indicate its essence more accurately, pleasure does not determine the energy as the development which is contained in the energy, but as the end or aim which is to be secured.<sup>85</sup> On this account, it is not, like becoming or transition, an imperfect state, but a whole; it is perfect at all times, and in need of nothing else, which, subsequently accruing, must complete its form; indeed, it is not in time at all, but only in the now;<sup>86</sup> in a word, it is simply the conclusion, or the end of the activity. On this account, also, Aristotle is of opinion that it consists in rest, rather

<sup>83</sup> Eth. Nic. x. 2. *ἐλοίμεθα γὰρ ἂν ταῦτα, καὶ εἰ μὴ γίνοιτ' ἂπ' αὐτῶν ἡδονή. ὅτι μὲν οὖν οὔτε τὰγαθὸν ἡ ἡδονή, οὔτε πᾶσα αἰρετή, δῆλον ἔοικεν εἶναι.*

<sup>84</sup> Eth. Nic. vii. 13. *οὐ γὰρ γενέσεις εἰσὶν αἱ ἡδοναί, οὐδὲ μετὰ γενέσεως πᾶσαι, ἀλλ' ἐνέργεια καὶ τέλος. — διὸ καὶ οὐ καλῶς ἔχει τὸ αἰσθητὴν γένεσιν φάναι εἶναι τὴν ἡδονήν, ἀλλὰ μᾶλλον λεκτέον ἐνέργειαν τῆς κατὰ φύσιν ἔξεως. ἀντὶ δὲ τοῦ αἰσθητὴν ἀνεμπόδιστον. δοκεῖ δὲ γένεσις τις εἶναι, ὅτι κυρίως ἀγαθόν. τὴν γὰρ ἐνέργειαν γένεσιν οἴονται εἶναι. ἔστι δ' ἕτερον.* The meaning of the last sentence is, that pleasure seems to be a becoming, because it is really the good, i. e. the energy. That is to say, becoming and energy, things so totally opposite, are sometimes confounded together.

<sup>85</sup> Eth. Nic. x. 4. *τελειοῖ δὲ τὴν ἐνέργειαν ἡ ἡδονή, οὐχ ὥς ἡ ἔξις ἐνυπαρχουσα, ἀλλ' ὥς ἐπιγιγνόμενόν τι τέλος, ὅλον τοῖς ἀκμαίοις ἡ ὥρα.*

<sup>86</sup> Ib. 3.

than in movement.<sup>87</sup> This, of course, implies that pleasure is not a mere inactive enjoyment, but is inseparably combined with the soul's activity, for without energy, no pleasure can arise, and every energy is terminated by a pleasure.<sup>88</sup> Action and pleasure are inseparably united by a natural union, and, when they are realised by a perfect life, they constitute happiness. The question, then, between the good and true, and the false and apparent pleasure is, on these principles, simply resolved by Aristotle. For as he places happiness in the fullness of human activity, and, on the one hand, depreciates the merely animal activity, while, on the other, he does not absolutely exclude the rational, and, nevertheless, does not ascribe it to ethical conduct, he naturally despises corporeal pleasure; and, although he exalts, indeed, the pleasure of knowledge above all others, he still assigns less perfection to human than to divine pleasure. Consequently, the pleasure which is pursued by the moral life, consists merely in the enjoyment of rational and virtuous conduct.<sup>89</sup> He, therefore, places corporeal pleasure in the same relation to moral conduct, as that of outward possessions to

<sup>87</sup> Ib. vii. 15. καὶ ἡδονὴ μᾶλλον ἐν ἡρεμίᾳ ἐστὶν ἢ ἐν κινήσει.

<sup>88</sup> Eth. Nic. x. 5 in. πότερον δὲ διὰ τὴν ἡδονὴν τὸ ζῆν αἰρούμεθα ἢ διὰ τὸ ζῆν τὴν ἡδονήν, ἀφείσθω ἐν τῷ παρόντι· συνεξεῖχθαι μὲν γὰρ ταῦτα φαίνεται καὶ χωρισμὸν οὐ δέχεσθαι· ἀνευ τε γὰρ ἐνεργείας οὐ γίνεται ἡδονή, πᾶσάν τε ἐνέργειαν τελειοῖ ἡ ἡδονή. The question here raised by Aristotle is nowhere determined precisely. The answer to it is, however, furnished by his notion of happiness, which is at once an *eúzwia* and *eúπραξία*. Ib. i. 8.

<sup>89</sup> Eth. Nic. x. 5 fin. τῶν δ' ἐπιεικῶν δοκούσων εἶναι ποίαν ἢ τίνα φατίον τοῦ ἀνθρώπου εἶναι; ἢ ἐκ τῶν ἐνεργειῶν δῆλον; ταύταις γὰρ ἔπονται αἱ ἡδοναί· εἴτ' οὖν μία ἐστίν, εἴτε πλείους αἱ τοῦ τελείου καὶ μακαρίου ἀνδρὸς αἱ ταύτας τελειοῦσαι ἡδοναί, κυρίως λέγουσι· ἀνθρώπου ἡδοναί εἶναι· αἱ δὲ λοιπαὶ δευτέρως καὶ πολλαστῶς, ὥσπερ αἱ ἐνέργειαι.



happiness. We must, necessarily, include both corporeal pleasure, and outward possession, within the objects of our moral efforts, so far, at least, as they are indispensable to the acquisition of a free and unimpeded life, and to the enjoyment of undisturbed felicity. The pleasures of the body, which are, in this respect, necessary to man, are incapable of any immoderation, even because they are necessary.<sup>90</sup> But love and friendship are necessary to man as a social animal instinctively desiring the society of his fellows, and are classed by Aristotle among the necessary pleasures; but, at the same time, he considers them to be more noble and more excellent than all the others, by reason of the energy which is in friendship, whence to love is more to be desired than to be loved.<sup>91</sup> Thus it is that pleasure in love attaches itself to the love of virtuous actions, as also that love is either a virtue, or at least connected with virtue.<sup>92</sup> In general it is admitted that man ought to pursue that pleasure which is combined with some virtuous activity; for even corporeal pleasure is so far allowable as it is consistent with virtue; and the reason is satisfied when it is not impeded in its activity by the body, i. e. when it attains to a simple freedom from all bodily pains.<sup>93</sup> The pleasure in which the good man rejoices is good and true, as generally, whatever is good to all men, or at least to the good, must be universally admitted to be such.<sup>94</sup>

<sup>90</sup> Eth. Nic. vii. 6, 14, 15.

<sup>91</sup> Eth. Nic. viii. 9; Eth. Eud. vii. 8; Magn. Mor. ii. 11, 12.

<sup>92</sup> Eth. Nic. viii. 1; Eth. Eud. vii. 1.

<sup>93</sup> Eth. Nic. vii. 12 fin.

<sup>94</sup> Eth. Nic. x. 5. δεκτὴ δ' ἐν ἅπασιν τοῖς τοιούτοις εἶναι τὸ φαινόμενον τῷ

In this manner, Aristotle shows that pleasure is connected with good; and, in fact, when we follow his notion of good, it is impossible to say that he recommends aught else than a rational self-love, which desires good for itself, but without depriving others of it, and which listens to reason as being man's true and proper self, and is prepared to sacrifice all external advantages for some great and good action; for, he says, it is better to enjoy a great pleasure for a short while, than many slight ones for a long time; better to live gloriously for a year, than for many years as the common herd; and better to perform one great and glorious deed, than many trifling acts.<sup>95</sup> The purity of Aristotle's ethical views is, therefore, unquestionable. Still we must not be debarred, by this admission, from examining whether the notion which he advances of pleasure, exhausts every topic which it is intended to convey. Now, in this respect, it is surprising that he should pass over, without examination, a point which he, nevertheless, incidentally notices in his comparison of pleasure with science. While science, he says, is the same for all men, pleasure is not; for the former constitutes the universal, the latter the special in the soul.<sup>96</sup> So that pleasure cannot rightly be named the termination of energy simply, but of energy in special reference to ourselves. And as, according to this, there would appear to be something selfish in the notion of pleasure, Aristotle ought to

*σπουδαίῳ· εἰ δὲ τοῦτο καλῶς λήγεται, καθάπερ δοκεῖ, καὶ ἔστιν ἐκάστων μέτρον ἢ ἀρετὴ καὶ ὁ ἀγαθός, ὃ τοιοῦτος, καὶ ἡδοναὶ εἶναι ἀνὰ αὐτῶν φαίνεσθαι. Ib. c. 2. δὲ γὰρ πᾶσι δοκεῖ, τοῦτ' εἶναι φάμεν.*

<sup>95</sup> Eth. Nic. ix. 8; Eth. Eud. vii. 6; Magn. Mor. ii. 13, 14.

<sup>96</sup> Eth. Nic. x. 5; Magn. Mor. ii. 7.

have shown, in order to purify completely his doctrine, that in all this there is nothing but a rational self-love, which consists simply in this, that man does not pursue the good and the beautiful merely for their own sakes, but with a view also to make them his own, and that his pleasure in them arises from the possession of the beautiful and good.

But, now, if that pleasure only be real which delights in virtue, the question naturally arises,—what is virtue. We have already observed that the virtue of Aristotle is purely relative to the passions and emotions of the soul. The acts which arise from these are distinguished from virtuous actions in this,—that the former are performed by a natural instinct, and without design, whereas it is an essential property of virtue that man should perform the good and the beautiful consciously and intentionally.<sup>97</sup> Virtue, therefore, is not subject to the changeable uncertainty of the passions, but it is a stable and abiding principle in the soul; indeed, it is even more stable than science, for it does not allow itself to be forgotten.<sup>98</sup> Virtue is indestructible by any long habit of conduct.<sup>99</sup> As, then, virtue does not dwell in us by nature, and does not impel us to contradictory practices, it cannot be a mere capacity of the soul. It remains, therefore, to be concluded that virtue is a disposition acquired by practice, a property taken

<sup>97</sup> Eth. Nic. ii. 3.

<sup>98</sup> Ib. i. 11.

<sup>99</sup> Ib. ii. 3. τὰ δὲ κατὰ τὰς ἀρετὰς γινόμενα οὐκ ἴαν αὐτὰ πως ἔχῃ, δικαίως ἢ σωφρόνως πράττεται, ἀλλὰ καὶ ἴαν ὁ πράττων πως ἔχων πράττῃ· πρῶτον μὲν ἴαν εἰδώς, ἔπειτ' ἴαν προαιρούμενος καὶ προαιρούμενος δι' αὐτά, τὸ δὲ τρίτον καὶ ἴαν βεβαίως καὶ ἀμετακινήτως ἔχων πράττῃ. — ἅπερ καὶ ἐκ τοῦ πολλάκις πράττειν τὰ δίκαια καὶ τὰ σώφρονα περιγίνεται.

possession of and improved, or, a habit of the soul.<sup>100</sup> As such, it is not an act, but rather a tendency or disposition to good actions.<sup>101</sup> The next question, therefore, is, to determine the species of habit which virtue is. Now it is clear, that what is called the virtue of a thing, is that by which it accomplishes its proper work; accordingly, the virtue of a man must be that habit or dexterity by which he executes well his proper work. But in every work, whether of science or of art, one may do too much or too little, as also a sufficiency (*ἰσόν*), which is intermediate between too much and too little; and the work which science or art has to perform is, even to accomplish that due mean to which nothing is to be added, and from which nothing is to be subtracted. If, now, virtue be the most accurate of arts, it must be regarded as the dexterity by which man hits upon the due medium in all his actions, and in the conduct of the passions of the soul.<sup>102</sup> By want and excess things are spoiled; it is only the proportional that produces, enlarges, and preserves.<sup>103</sup> Still this medium, which virtue maintains, must not be confounded with an absolute mean which is identical and constant for all relations; neither is it an arithmetical mean but one relative to ourselves. The right standard of morality is a mean which varies according to, and

<sup>100</sup> The moral sense of the term *ἥξις*, as employed by Aristotle, is difficult to determine; nearly allied to it are *διακείσθαι*, *διάθεσις* and *ποιότης*. *Met.* v. 20; *Cat.* 8; *Eth. Eud.* ii. 2.

<sup>101</sup> *Eth. Eud.* i. 3; *Magn. Mor.* i. 3. In a popular definition, virtue is also called a *δύναμις*. *Rhet.* i. 9.

<sup>102</sup> *Eth. Nic.* ii. 5; *Eth. Eud.* ii. 1, 3; *Magn. Mor.* i. 8.

<sup>103</sup> *Eth. Nic.* ii. 2; *Eth. Eud.* ii. 3; *Magn. Mor.* i. 5.

is to be determined by, circumstances; or, in other words, when a matter is to be done it is sufficient to determine its mean, relative to the conditions and means of its accomplishment, to the individuals whom it may affect, and to the reasons of its being undertaken.<sup>104</sup> For what is enough for one individual is insufficient for another; what, under particular circumstances, is advisable in one, would be rashness in others; e. g. the virtue of a slave is one, and that of a man, or of a woman, or of a child, respectively differs.<sup>105</sup> This view is further confirmed by the fact, that error is manifold, but the right is singular; and, consequently, virtue ever shows itself as a mean between two opposite vices, of which one transgresses, but the other falls short of the right measure.<sup>106</sup> When, however, it is further asked how this medium is to be determined, the only precise answer that can be given is,—that it is such as every intelligent person will determine it, or that it is a medium conformable to right intelligence.<sup>107</sup> The perfect explanation of virtue, therefore, is, that it consists in the skilfulness of design, which chooses the medium most suitable to the individual, according as this may be determined by correct insight, or by the man of intelligence.<sup>108</sup>

<sup>104</sup> Eth. Eud. ii. 3; Eth. Nic. ii. 2, 5. τὸ δ' ὅτε δεῖ, καὶ ἐφ' οἷς, καὶ πρὸς οὗς, καὶ οὗ ἕνεκα, καὶ ὡς δεῖ, μέσον τε καὶ ἀριστον, ὅπερ ἐστὶ τῆς ἀρετῆς.

<sup>105</sup> Pol. i. 13.

<sup>106</sup> Eth. Nic. ii. 5; Eth. Eud. ii. 3; Magn. Mor. i. 8.

<sup>107</sup> Eth. Nic. ii. 6; vi. 1.

<sup>108</sup> Eth. Nic. ii. 6. ἔστιν ἄρα ἡ ἀρετὴ ἕξις προαιρετικὴ ἐν μεσότητι οὖσα τῇ πρὸς ἡμᾶς, ὠρισμένη λόγῳ καὶ ὡς ἂν ὁ φρόνιμος ὀρίσσει. Eth. Eud. ii. 10; Magn. Mor. i. 8.

If we examine this explanation of virtue, it is evident, first, that it is strongly stamped with the general moderation of Aristotle's mind ; and, secondly, that it draws the character of virtue from a particular line of conduct, and not from the internal force of principle, from which that conduct springs. This was inevitable, since the investigation into the difference between virtue and other operations of designing skill, grew out of the question, what is the work of virtue? Nevertheless, this was a result inconsistent with Aristotle's intention, which was anything rather than to make the distinction between what is moral and what is immoral to depend upon the act or its consequences ; on the contrary, he stated it to be essential to virtue, that it should not merely pursue what is good, but that it should pursue good simply for its own sake.<sup>109</sup> On this point, however, Aristotle expresses himself very imperfectly. Moreover, the mode in which the right medium is ascertained, is left quite undetermined. That man, he says, acts virtuously, who finds the medium in the same way as the wise man would. But then, how is the wise man to find it? Aristotle is far from unconscious that he has left this point very obscure<sup>110</sup> ; he thinks, however, that he meets this deficiency by the greater precision he gives to his definition of the sage. And, consequently, it is clear that he considers his

<sup>109</sup> Eth. Nic. ii. 3. προαιρούμενος δι' αὐτά.

<sup>110</sup> Eth. Nic. vi. 1. ἔστι δὲ τὸ μὲν εἰπεῖν οὕτως ἀληθὲς μὲν, οὐθὲν δὲ σαφές — τοῦτο δὲ μόνον ἔχων ἂν τις οὐθὲν ἂν εἰδείη πλείον. Eth. Eud. vii. 15 ; Magn. Mor. i. 35.

notion of moral virtue to be very indistinct, if considered independently of that of intelligence, or correct insight.

We have already observed that, according to Aristotle, intelligence must form itself by right practice. On this rests the distinction which he draws between ethical (*ἠθικαί*) and intellectual (*διανοητικαί*) virtues; the former, for instance, consist in the skill of the irrational part;—i. e. the desires of the soul to allow itself to be guided by the reason; the latter, in that of the soul, to guide aright the desires to good.<sup>111</sup> But from the mutual relation of the two kinds of virtue, it follows that they cannot exist separately; for in the absence of reason the desires cannot be rightly guided; and, unless the passions can be rightly guided, the reason cannot exercise its dominion over the soul. The good man acts not merely in conformity with right insight, but also with it; and when we do not desire the good, we do not see what the good is. The right determination is neither without intelligence nor without moral virtue, since the former tells us what the end is, and the latter impels us to do that which attains the end.<sup>112</sup> In this respect, all virtues are inseparably connected with each other, for they are inseparable from practical insight, which is essentially one.<sup>113</sup> It is clear that, with Aristotle, the

<sup>111</sup> Eth. Nic. i. 13; Eth. Eud. ii. 1; Magn. Mor. i. 5.

<sup>112</sup> Eth. Nic. vi. 13. καὶ ὅτι οὐκ ἔσται ἡ προαίρεσις ὀρθὴ ἀνευ φρονήσεως, οὐδ' ἀνευ ἀρετῆς· ἡ μὲν γὰρ τὸ τέλος, ἡ δὲ τὰ πρὸς τὸ τέλος ποιῆ πράττειν.

<sup>113</sup> Eth. Nic. i. 1. δῆλον οὖν ἐκ τῶν εἰρημίνων, ὅτι οὐχ οἷόν τε ἀγαθὸν εἶναι κυρίως ἀνευ φρονήσεως, οὐδὲ φρόνιμον ἀνευ τῆς ἠθικῆς ἀρετῆς· ἀλλὰ καὶ ὁ λόγος ταύτῃ λύοιτ' ἂν, ὃ διαλεχθεὶς τις ἂν, ὅτι χωρίζονται ἀλλήλων αἱ ἀρεταί. — τοῦτο γὰρ κατὰ μὲν τὰς φυσικὰς ἀρετὰς ἐνδέχεται, καθ' ὅς

ethical virtues and the rational intelligence form, in general, the two necessary elements of virtue,<sup>114</sup> which accounts for the circumstance that, at times, the ethical virtues are simply called virtue, and, occasionally, the rational insight reckoned among the practical virtues.<sup>115</sup> Whenever these two elements are combined together, that moral energy which is the spring of all moral conduct, is invariably present. For this force of energy is nothing else than the practical intelligence. It may be said, undoubtedly, that the moral force is not fully expressed by it, since the physical impulse, which forms the ground of moral virtue, is distinguished from the practical insight; but in this distinction we only recognise Aristotle's usual habit of separating, in discussion, matters which really belong to each other. For it is clear that the physical impulse to right action is, according to Aristotle, contained in the virtue which is completed by practical intelligence, since the practical insight results from the well-exercised and practised impulse.

When, however, Aristotle proceeds further with the division of virtues into moral and intellectual, he invariably confines his attention to one element of virtue, which circumstance has naturally proved prejudicial to the scientific rigour of his theory. The fundamental principle by which his division of the moral virtues is regulated, is this, that in all theories concerning right conduct, the more gene-

δὲ ἀπλῶς λέγεται ἀγαθός, οὐκ ἐνδείχεται, ἅμα γὰρ τῇ φρονήσει μίαν εἶναι πᾶσαι ὑπάρξουσι. Magn. Mor. i. 35.

<sup>114</sup> Eth. Nic. x. 8.

<sup>115</sup> Eth. Eud. ii. 3.



ral the ideas advanced, the more jejune is their instruction; while the most special are the most instructive and true, since practice is always concerned with particulars. Accordingly, he supposes a greater number of virtues than Plato does.<sup>116</sup> In his investigation into each of these, his first point is to show that each individual virtue is a mean between two vices.<sup>117</sup> However, he does not seem to have attributed any great importance to his own division, for it is not supported by any principle or argument, and is given differently in different places.<sup>118</sup> On the whole, it manifestly proceeds on the idea that there must necessarily be as many species of virtue as there are of passions of the soul accompanied by pleasure and pain. But the division of the passions is drawn entirely from an extrinsic consideration of that which, according to Aristotle, belongs to the good things of life. Among these he reckons sensuous pleasure, riches, distinction, and a suitable position in the smaller society of a family, as well as in the larger union of the state. As to the pleasures of sense, he considers that it is necessary to distinguish two virtues, fortitude and temperance, the object of one being to subdue pain, and of the other to moderate pleasure.<sup>119</sup> For the brave man is shown chiefly in despising pain, and the temperate in resisting the allurements of pleasure. In this it is evident that Aristotle derives his ideas of

<sup>116</sup> Eth. Nic. ii. 7.

<sup>117</sup> Occasionally the Platonic division is adopted, but only when strict accuracy is not indispensable. Pol. vii. 1; Rhet. i. 5.

<sup>118</sup> Eth. Nic. ii. 7. ῥητὶον οὖν καὶ περὶ τούτων, ἵνα μᾶλλον κατὶδωμεν, ὅτι ἐν πᾶσιν ἡ μεσότης ἐπαινετόν. Eth. Eud. iii. 7 in.

<sup>119</sup> Eth. Nic. iii. 15.

virtue from the usage of language, rather than establishes them in the necessity of their distinctions. Thus, too, the pleasure of money and valuables gives rise to two virtues, liberality (*ἐλευθεριότης*), and the love of splendid and suitable establishment (*μεγαλοπρέπεια*), which differ from each other merely in the comparative dignity of their objects, which, in the latter, are low and mean, but, in the former, exalted and noble.<sup>120</sup> A similar relation subsists between the two virtues, which have glory for their object, that greatest of outward advantages, viz. a noble pride and love of distinction, the former directing itself to the great, and the latter to the little,<sup>121</sup> wherein, however, Aristotle appears to have forgotten that great and little, in a moral sense, are only relative. To the virtues which belong to social intercourse, we must, without Aristotle's guidance, however, reckon gentleness (*πραιότης*), which holds the middle place between anger and tame submission.<sup>122</sup> Connected herewith are several virtues, which are, however, mentioned in no strict order of affinity; first of all, affability, which is near akin to friendship, but not a simply passive state;<sup>123</sup> next, the virtue of veracity, which stands intermediate between boasting and raillery;<sup>124</sup> and, lastly, since man stands in need

<sup>120</sup> Ib. ii. 7; iv. 4.

<sup>121</sup> Ib. ii. 7; iv. 7, 10.

<sup>122</sup> Ib. iv. 11. The negligence of Aristotle in treating of these virtues is clear, from this fact, among others, that the arrangement of them is different in the several Ethics. In the Nicomachean the order is that which is given in the text, but in the other two, gentleness follows courage and moderation; and this is not the only deviation. The other virtues are but cursorily noticed in the Eudemic ethics, where they appear in the light of merely physical virtues.

<sup>123</sup> Eth. Nic. iv. 12.

<sup>124</sup> Ib. 13.

of recreation, the virtue of refined and pure enjoyment.<sup>125</sup> This division almost forces a repetition of the previous remark, that Aristotle's ethical theory is far from being rigorously systematic. He does not, like those who came after him, write a moral treatise for the common herd, who only serve their most immediate wants; but his object is to teach how the skilful statesman, in the more liberal circles of society, may cultivate, in moderation, a due desire of honour and advancement. Indeed, to the judgment of modern times, he almost appears to have directed too much attention to these advantages; but it must be remembered that he was influenced by the circumstances of his age and country, as others were who pursued the very opposite direction. Nevertheless, it does seem to be a want of scientific strictness, when he brings anger within the domain of ethics, and, nevertheless, withdraws from the moral estimate, man's relation to certain other passive states, such as envy, shame, and the like, because he regards them as consequences of the physical organisation. This can only be excused by the supposition that his chief object in these investigations is to show in detail how, in every virtue, the medium between two opposite vices alone deserves praise.

To political virtue Aristotle devotes a long and special investigation. This is only consistent with the general object of his moral doctrine, which is the state. Virtue, in a state, is justice. Justice, however, is taken now in a wider, now in a narrower, signification. In the former it designates

<sup>125</sup> *Ib.* 14.

the intention and the power to do to every one what is agreeable to law. But law relates to everything in human conduct that concerns man's intercourse with his fellows, so that, in this extensive sense, justice comprises all virtues; not, however, in and by themselves, but so far as they concern others.<sup>126</sup> But justice, in this sense, is not here the subject of investigation, but merely as it denotes a special virtue, distinct from every other. In this use of the term, justice is that which gives to every one his own.<sup>127</sup> Thus does Aristotle explain and distinguish two species of justice, the distributive (*διανεμητικόν*), and the retributive (*διορθωτικόν*). In a political society, it is just that every one should participate, according to merit, in those goods which are divisible among its members, namely, honours and property.<sup>128</sup> Here the analogy is geometrical, and the value of the individual is to be, to the value of his allotted portion, in the same ratio as that of another is to that of his portion. Retributive justice,<sup>129</sup> on the other hand, exacts equality in wares, in the medium of exchange; and the question here is not what is the merit of the exchanger, and, consequently, the ratio of exchange is not geometrical, but simply arithmetical.<sup>130</sup> In both cases alike, justice exhibits itself as the virtue

<sup>126</sup> Eth. Nic. v. 3; Magn. Mor. i. 34.

<sup>127</sup> Magn. Mor. i. 34. *καὶ δίκαιος δὲ ὁ τὸ ἴσον βουλούμενος ἔχειν. Rhet. i. 9. ἔστι δὲ δικαιοσύνη μὲν ἀρετὴ, δι' ἣν τὰ αὐτῶν ἕκαστοι ἔχουσι.*

<sup>128</sup> Eth. Nic. v. 5, 6. *τὸ γὰρ δίκαιον ἐν ταῖς διανομαῖς ὁμολογοῦσι πάντες κατ' ἀξίαν τινὰ δεῖν εἶναι.*

<sup>129</sup> The term *συνάλλαγμα*, which I have rendered by exchange, is, however, employed in a very wide sense by Aristotle, and sometimes indicates a covenant enforced by the judge.

<sup>130</sup> Eth. Nic. v. 7.

through which the proportionate enjoyment of the social benefits is insured. And this affords to Aristotle a further confirmation of his view of virtue; for justice is the mean between doing and suffering injustice,<sup>131</sup> which almost implies the opinion that to suffer injustice is a fault on the part of the sufferer, although he confesses that no one voluntarily suffers wrong.<sup>132</sup> Aristotle limits justice solely to the civil relations of life;—while, in the relation between master and slave, parent and child, husband and wife, he sees only a certain resemblance to true justice.<sup>133</sup> In the state, however, he distinguishes between what is naturally just, and what is legally or humanly just. The former is everywhere the same, while the latter depends on the will of the legislator, and before the enactment of the law it is indifferent whether an act is consistent with or contrary to the law.<sup>134</sup> Natural law is better than positive law,<sup>135</sup> and it therefore follows that equity is better than legal justice; for law is necessarily general, and cannot consider every possible case; on this account, it only declares what, in most cases, is just, while, for all special cases, a rectification of its enactments is necessary; and this is to be done by equity, which ought to be practised, in particular cases, by every one, and judicial sentence given, in all cases, agreeably to

<sup>131</sup> Eth. Nic. v. 9.

<sup>132</sup> Eth. Nic. v. 10, 11.

<sup>133</sup> LL. II.

<sup>134</sup> Eth. Nic. v. 10.

<sup>135</sup> Magn. Mor. i. 34. βέλτιον οὖν δίκαιον τὸ κατὰ φύσιν τοῦ κατὰ νόμον.

it.<sup>136</sup> In such cases, natural justice is not violated, although strict legality may.<sup>137</sup>

These disquisitions concerning ethical virtues contain but few precepts for the conduct of life. These are the more missed, the more difficult it is to find the exact medium between opposite vices.<sup>138</sup> But in order to bring us, at last, near to this, a rule of prudence is given, according to which we ought carefully to note to what deviations from the right path we are most inclined; from these we ought to abstain, and turn ourselves to the opposite direction, in the same way as they do who bend contrariwise a crooked stick in order to straighten it.<sup>139</sup> But it is palpable that we cannot follow this precept without knowing what the right mean is, since it is only by this that we judge which are our greater or less deviations. Consequently, in the investigation into the moral virtues, we are everywhere referred back to the practical intelligence of the right medium. It is, therefore, necessary to see what Aristotle teaches on this point.

If, then, agreeably to what was previously observed, we exclude from our inquiry concerning intellectual virtues, whatever belongs to wisdom

<sup>136</sup> Eth. Nic. v. 14. τὸ ἐπιεικὲς δίκαιον μὲν ἐστίν, οὐ τὸ κατὰ νόμον διέ, ἀλλ' ἐπανόρθωμα νομίμου δικαίου. αἴτιον δ' ὅτι ὁ μὲν νόμος καθόλου πᾶς, περὶ ἐνίων δ' οὐχ ὁλόν τε ὀρθῶς ἐπιεῖν καθόλου. ἐν οἷς οὖν ἀνάγκη μὲν ἐπιεῖν καθόλου, μὴ ὁλόν τε δι' ὀρθῶς, τὸ ὡς ἐπιτοπλίον λαμβάνει ὁ νόμος, οὐκ ἀγνοῶν τὸ ἀμαρτανόμενον. καὶ ἐστὶν οὐδὲν ἥττον ὀρθῶς τὸ γὰρ ἀμάρτημα οὐκ ἐν τῷ νόμῳ, οὐδ' ἐν τῇ νομοθέτῃ, ἀλλ' ἐν τῇ φύσει τοῦ πράγματός ἐστιν εὐθὺς γὰρ τοιαύτη ἡ τῶν πρακτῶν ὕλη ἐστίν.

<sup>137</sup> Magn. Mor. ii. 1.

<sup>138</sup> Eth. Nic. ii. 9.

<sup>139</sup> L. 1.

and science, all that remains for the regulation of virtuous life is the practical intelligence, or the human understanding. This is a right cultivation of that portion of the soul which is occupied with a knowledge of the possible and contingent (*δοξα-στικόν, λογιστικόν*), and such a cultivation as has become a virtue, that is, so fixed a habit, that to forget it is impossible.<sup>140</sup> This stability of the practical intelligence Aristotle derives from the activity of the reason, to which belongs generally all knowledge of the truth,<sup>141</sup> and which raises us superior to all indecision or uncertainty of opinion. Still, the reason in the practical intelligence is opposed to the reason which is cognisant of the principles of things, for the former does not direct itself to the highest notions, but to the lowest limits of science, i. e. to the particular with which all action is occupied, and which is recognised by a certain common sense as that which is good for us, which common sense must even be regarded as the practical reason.<sup>142</sup> This

<sup>140</sup> Eth. Nic. vi. 2, 5 ; Magn. Mor. i. 35. This is one of those inadequate explanations which we so frequently meet with in Aristotle. He describes *φρόνησις* as a mean between two vices, *εὐθθεια* and *πανουργία*. Eth. Eud. ii. 3. But the latter does not consist in too great clear-sightedness, but in the want of a moral purpose. Eth. Eud. v. 12 ; Eth. Nic. vi. 13. It is only the moral virtues, and not the intellectual, that possess a mean. Consequently, although there may be excess in external good things, there cannot be in those of the soul.

<sup>141</sup> Eth. Nic. vi. 2.

<sup>142</sup> The text attempts to reconcile two passages which apparently contradict each other. Eth. Nic. vi. 9 fin. *ἀντίκειται μὲν δὴ (sc. ἡ φρόνησις) τῷ νῦν· ὁ μὲν γὰρ νοῦς τῶν ὄντων, ὧν οὐκ ἔστι λόγος· ἡ δὲ τοῦ ἰσχύατου, οὗ οὐκ ἔστιν ἐπιστήμη, ἀλλ' αἰσθησις, οὐχ ἡ τῶν ἰδίων, ἀλλ' οἷα αἰσθανόμεθα, ὅτι τὸ ἐν τοῖς μαθηματικοῖς ἰσχατον τρίγωνον· στήσεται γὰρ κακεῖ· ἀλλ' αὕτη μᾶλλον αἰσθησις ἢ φρόνησις· ἐκείνης δὲ ἄλλο εἶδος.* Eth. Nic. vi. 12. *καὶ ὁ νοῦς τῶν ἰσχύατων ἐπ' ἀμφοτέρα· καὶ γὰρ τῶν πρώτων ὄντων καὶ τῶν ἰσχύων νοῦς ἔστι καὶ οὐ λόγος, καὶ ὁ μὲν κατὰ τὰς ἀποδείξεις τῶν ἀκινή-*

explanation refers us in fact to a certain undefinable principle of moral conduct, which, like the indemonstrable principles of science, admits not of any ulterior demonstration.

But what is apparently still more remarkable, we find that the idea of prudence, like those of the moral virtues, is given in a very general manner by Aristotle, without any ulterior determination of the manner in which the prudent ought to act.<sup>143</sup> Accordingly, it has been justly objected to the Ethics of Aristotle, that it ultimately leaves everything in doubt; that it teaches, it is true, that man ought to pursue a just medium, and that this just medium is indicated by the conduct of the sage; but how and where the sage himself is to find it, is left wholly undetermined. There is much, undoubtedly, to justify this reproach, but, at the same time, it proves that Aristotle did not look upon ethics as a distinct branch of philosophy, but as dependent upon, and as a division of, politics. The object of the former is merely to determine what the sage ought to do, and the ends he ought morally to propose to himself. Consequently, Aristotle makes political sagacity and moral prudence to be the same, so far forth as a habit of mind, but as to their actual existence, to be distinct.<sup>144</sup> The meaning of this obscure position is probably this: that, commonly, the idea of wisdom is limited to

των ὄρων καὶ πρώτων, ὁ δ' ἐν ταῖς πρακτικαῖς τοῦ ἐσχάτου καὶ ἐνδεχομένου καὶ τῆς ἐτίρας προτάσεως. — τούτων οὖν ἔχειν δεῖ αἰσθῆσιν αὐτῇ δ' ἐστὶ νοῦς.

<sup>143</sup> Compare also Magn. Mor. ii. 10.

<sup>144</sup> Eth. Nic. vi. 8. ἔστι δὲ καὶ ἡ πολιτικὴ καὶ ἡ φρόνησις ἡ αὐτὴ ἕξις τὸ μῖντοι εἶναι οὐ τὸ αὐτὸ αὐταῖς.



prudent acts between individuals, whereas the knowledge of one's greatest good, which is the object of wisdom, is impossible, without taking into consideration the interest of family and country, and that thus true wisdom becomes true economy and true statesmanship.<sup>145</sup>

If, then, we must look to the Politics for an accurate description of rational intelligence, it follows that the development of moral virtue must be dependent upon the political life. For, as we formerly said, moral virtue is the result of intellectual virtue, and the intellectual of the moral. To release us from the circlings of this inextricable maze, Aristotle directs us to education and instruction. These, however, we receive from the state; for legislators habituate men to good morals, and make them good citizens; while careful teaching awakens the reason and intelligence.<sup>146</sup> It is clear, therefore, that the morality of the citizens depends upon the state. This, however, implies the existence of a state founded upon rational principles, antecedently to the morality of individuals; and as rational institutions are impossible without rational individuals to establish them, the moral intelligence of some men supposes the pre-existence of the moral virtue of others. Thus did Aristotle derive the morality of individuals from that of the species, in the same manner as he traces the physical

<sup>145</sup> L. i. δοκεῖ δὲ καὶ ἡ φρόνησις μάλιστα εἶναι ἡ περὶ αὐτὸν καὶ ἕνα, καὶ ἔχει αὕτη τὸ κοινὸν ὄνομα φρόνησις· ἐκείνων δ' ἡ μὲν οἰκονομία, ἡ δὲ νομοθεσία, ἡ δὲ πολιτική. — καίτοι ἴσως οὐκ ἴσται τὸ αὐτοῦ ἀνευ οἰκονομίας, οὐδ' ἀνευ πολιτείας.

<sup>146</sup> Eth. Nic. ii. 1.

man successively backwards to an earlier physical man.

Before we proceed to the examination of Aristotle's *Economics* and *Politics*, a portion of his *Ethics*, which, treating of friendship, enters at some length into details, demands our attention. In no other part of his works does our author appear in so estimable a light as in this. Friendship, according to Aristotle, is not, indeed, a virtue; but virtue, like happiness, cannot exist without friendship, for friendship makes a considerable element in human happiness.<sup>147</sup> He shows also, that society is indispensable to man, and that a life of solitude is sad and wearisome. But to live with others he must be virtuous, and exercise himself in all good and noble deeds. Virtuous friendship is far superior to every other which subsists only for profit or amusement; it alone is lasting, for virtue alone is constant.<sup>148</sup> There can be no love without a return, still the better part of love consists in loving, and not in being loved; for to love is an energy of the soul. Similarly, to do is better than to receive a kindness.<sup>149</sup> Love and concord subsist only among the good, who alone are capable of a true self-love, since none others have attuned their souls to harmony and concord. Such a self-love is in nowise censurable; it is not inconsistent with friendship to others, since it gives to all their own, and only desires for itself good and laudable actions.<sup>150</sup> But it

<sup>147</sup> *Eth. Nic.* viii. 1; cf. *Magn. Mor.* i. 32; *Eth. Nic.* iv. 12.

<sup>148</sup> *Eth. Nic.* viii. 6 in.; *Eth. Eud.* vii. 2; *Magn. Mor.* ii. 11.

<sup>149</sup> *Eth. Nic.* viii. 9; ix. 7; *Eth. Eud.* vii. 8; *Magn. Mor.* ii. 11, 12.

<sup>150</sup> *Eth. Nic.* ix. 6, 8; *Eth. Eud.* vii. 6, 7; *Magn. Mor.* ii. 11.

is clear that the end of love and friendship is the social and civil state, for they arise out of the same wants which give rise to political states : man is, in short, a political animal, and it is necessary to the perfection of his nature, to enter into a rational society with his fellows. Love and concord are, consequently, the bonds of political society.<sup>151</sup> Love forms the bond of community among friends, and every species of community forms an element of a political society.<sup>152</sup> There is, therefore, a very close affinity between love and justice, and in all the relations of justice there is a species of love ;<sup>153</sup> indeed, there are as many kinds of friendship as there are of communities and of justice.<sup>154</sup> In this respect, friendship must be distinguished into that between equals and that between unequals. The former may be more extensive or more circumscribed ; but still the highest degree of it can only subsist between a few, for man must be content if he finds even a few virtuous men.<sup>155</sup> The other is very diversified ; and it is either natural, or dependent on the differences of human society. In general, the law of distributive justice applies to the friendship of unequals, and its duties must be regulated by a sort of geometrical proportion.<sup>156</sup> The natural varieties of unequal friendship arise out of the recipro-

<sup>151</sup> Eth. Nic. viii. 1. *ἔοικε δὲ καὶ τὰς πόλεις συνέχειν ἡ φιλία.* Ib. ix. 6. *πολιτικὴ δὲ φιλία φαίνεται ἡ ὁμόνοια.*

<sup>152</sup> Ib. viii. 11. *αἱ δὲ κοινωνίαι πᾶσαι μορίοις ἰοίκασι τῆς πολιτικῆς.*

<sup>153</sup> Ib. 11, 14 ; Magn. Mor. ii. 11. *ἔτι δ' ἴσως ἀν δόξειεν, ἐν οἷς ἔστι δίκαιον, ἐν τούτοις καὶ φιλίαν εἶναι.*

<sup>154</sup> Eth. Nic. viii. 11, 14 ; Eth. Eud. vii. 9.

<sup>155</sup> Eth. Nic. ix. 10.

<sup>156</sup> Ib. 1 ; Eth. Eud. vii. 4, 9.

cal relations of husband and wife, father and child, master and slave, which several relations together constitute the tie of family. The relations of human society are respective of the political institutions of the state, and, consequently, this kind of unequal friendship is modified by the character of the constitution.<sup>157</sup> In this manner do the disquisitions upon friendship form the transition to the Economics and Politics.

The Economics of Aristotle treat of all the relations of domestic life. Its object, as of all other practical sciences, is to insure the virtuous conduct of the individual, so far as regards the duties of domestic life.<sup>158</sup> Accordingly, Aristotle's Economics are concerned more with the man than with any possessions either of material or live stock, with the freeman rather than with the slave, and is more interested for his virtue than for his property.<sup>159</sup> Now a family consists in the society of husband, and wife, and children, and in the communion of property.<sup>160</sup> The union of husband and wife is natural, since the man and woman cannot exist without each other. A natural impulse to leave behind them one like to themselves attracts them together, like the beasts; but this is more noble in the human than in other animals, for the intercourse of the former is not occasional and promiscuous, but man enters into a communion for life with one meet for him, and forms a mar-

<sup>157</sup> Eth. Nic. viii. 13; Eth. Eud. vii. 9.

<sup>158</sup> Occasionally riches are declared to be the end of economics. Eth. Nic. i. 1. This, however, is only true in a limited sense. Compare Pol. i. 8, 9.

<sup>159</sup> Pol. i. 13.

<sup>160</sup> Pol. i. 2, 3; Econ. i. 2.

riage whose object is not solely the propagation of children, but mutual help and affection.<sup>161</sup> With regard to the property of a family, Aristotle is of opinion that man ought to labour to secure the most valuable possession, and this is man. Consequently, the slave is a necessary element in the economy of a family.<sup>162</sup> Aristotle, like Plato, still adhered to the olden view that slavery was a dispensation of Nature, who has determined the end and destination of all her creatures, and, among these, of man, either to govern or to be governed. To some she has given intelligence to foresee and to design, and these she designed to be masters; to the others she has given bodily strength, to labour and to execute, and these are naturally slaves. It is more just, and more for the interest of the latter, to be governed than to govern, for they have only so much of reason as enables them to understand others, but not sufficient to guide themselves.<sup>163</sup> Aristotle, as a genuine Greek, considers it just that the Greeks should rule over the Barbarians; by nature, the Barbarian and the slavish are the same;<sup>164</sup> he approves even of forcibly seizing those who are by nature intended, and yet refuse to serve, and this he calls a just war.<sup>165</sup> Nevertheless, he admits that there may be men who are slaves by law, and not by nature, but these, he says, are improperly called slaves.<sup>166</sup> The proper

<sup>161</sup> Pol. i. 1.; Eth. Nic. viii. 14; Eth. Eud. vii. 10; Econ. i. 3.

<sup>162</sup> Pol. i. 2, 4; Econ. i. 5.

<sup>163</sup> Pol. i. 2, 5.

<sup>164</sup> Pol. i. 2; cf. ib. vii. 7.

<sup>165</sup> Ib. i. 8.

<sup>166</sup> Ib. i. 6.

slave is the absolute property of his master.<sup>167</sup> When, however, he proceeds to determine the moral relation of the master to the slave, his precepts are far from being marked with severity or rigour. He insists, it is true, upon punishments, but these are not to be inflicted unnecessarily; he forbids all arrogance, and insists on an adequate maintenance, and recommends kindly marks of respect, and, for encouragement of the slave, the hopes of liberty as a reward for long and faithful services. Indeed, the slave is to be habituated to virtue, although to the virtue of a slave, which consists not in the exercise of his own volition.<sup>168</sup> Still, these precepts are only given as calculated to insure the fitness of the slave as an instrument, and he advances it as a rule, not admitting of exception, that no friendship can subsist between master and a slave, and that the latter has no rights against the former.<sup>169</sup> It is true, that Aristotle qualifies this by annexing the condition—so far forth as slave, and not so far forth as man; for love and friendship, justice and concord, are possible among all men;<sup>170</sup> but, in fact, it is difficult to say what of man, as man, is still left to the slave proper of Aristotle, and wherefore it was that he did not feel himself constrained to conclude that man, as man, cannot be a slave.

<sup>167</sup> Ib. i. 4. διὸ ὁ μὲν δεσπότης τοῦ δούλου δεσπότης μόνον, ἐκείνου δ' οὐκ ἔστιν· ὁ δὲ δούλος οὐ μόνον δεσπότητος δούλος ἐστίν, ἀλλὰ καὶ ὅλως ἐκείνου.

<sup>168</sup> Ib. i. 13. ὁ μὲν γὰρ δούλος ὅλως οὐκ ἔχει τὸ βουλευτικόν. — ἔθεμεν δὲ πρὸς τὰναγκαῖα χρήσιμον εἶναι τὸν δούλον· ὥστε δῆλον, ὅτι καὶ ἀρετῆς δεῖται μικρᾶς καὶ τοσαύτης, ὅπως μήτε δι' ἀκολασίαν μήτε διὰ δειλίαν ἐλλείψῃ τῶν ἔργων. Ib. vii. 10; Econ. i. 5.

<sup>169</sup> Eth. Nic. viii. 13; Magn. Mor. i. 34.

<sup>170</sup> Eth. Nic. i. l.; cf. Pol. i. 6 fin.

The relation of the child to the father is, in some respects, similar; for it rests on a similar principle; since the son, until he is of age, is a part of, and belongs to the father,<sup>171</sup> and does not yet possess a rational will for his own government and guidance. Nevertheless the relation of the son to the father differs, in some respects, from that between master and slave, since the son does possess some degree, however imperfect and immature, of rational will.<sup>172</sup> Moreover, the son is destined to be a free citizen, and, consequently, the power of the state necessarily limits the parental authority. Aristotle, like Plato, would give to the state an extensive right of regulating education, without, however, removing the children from their respective families. From the same principle of supposed analogy between a child and a slave, Aristotle teaches, that a child is capable of a species of virtue, which, however, is not a positive and independent, or relative solely to the child itself, but results from the relation which subsists between the child and the parent, who is a perfect man, and, consequently, entitled to direct the conduct and actions of his children.<sup>173</sup> Such is his view of the child's duty of obedience to his father. The gratitude of children to their parents, like that of men

<sup>171</sup> Magn. Mor. l. 1.; Eth. Nic. v. 10. τὸ δὲ δεσποτικὸν δίκαιον καὶ τὸ πατρικὸν οὐ ταῦτόν τούτοις, ἀλλ' ὅμοιον· οὐ γὰρ ἔστιν ἀδικία πρὸς τὰ αὐτοῦ ἀπλῶς· τὸ δὲ κτῆμα καὶ τὸ τέκνον, ἕως ἂν ᾗ πηλίκον καὶ μὴ χωρισθῇ, ὥσπερ μέρος αὐτοῦ. It is a feature of the Greek character of Aristotle's mind, that he only speaks of the relation of the son towards the father, and not of that of the daughter to the mother.

<sup>172</sup> Pol. i. 13.

<sup>173</sup> L. 1. ἐπεὶ δ' ὁ παῖς ἀτελής, δῆλον ὅτι τούτου μὲν καὶ ἡ ἀρετὴ οὐκ αὐτοῦ πρὸς αὐτόν ἐστιν, ἀλλὰ πρὸς τὸν τέλειον καὶ τὸν ἡγούμενον.

to the gods, ought to know no bounds, for they owe to them their existence, their support, and education, in a word, whatever good they enjoy.<sup>174</sup> The father, on the other hand, ought to exercise his authority over his children solely for their good; on which account, Aristotle compares the father of a family to the sovereign of a state.<sup>175</sup>

The relation of husband and wife is somewhat different. Although their union rests on physical reasons, it ought, nevertheless, to be elevated to a moral principle, since the mutual dependence of the male and the female is not grounded solely in the bodily conformation, but also on the difference of their mental constitutions. This difference Aristotle does not, like Plato, resolve into one merely of degree. It is true he holds it to be clearly made out that man is better than woman, and that, consequently, the rule in the family is his of right;<sup>176</sup> still he observes, that the duties of the husband in a family are wholly different in kind from those of the wife, and also that manly virtue is very distinct from feminine. A man would be accounted a dastard if he were not braver than a woman, and a woman would appear singular who possessed all the qualities of a man. In a family the man ought to manage all outward affairs of business or profit, the woman to be a careful manager within. To these several duties they are destined by nature, and, accordingly, the man is endued with strength and courage, while the woman is weak and timorous. The woman must nurse the children,

<sup>174</sup> Eth. Nic. viii. 16.<sup>175</sup> Ib. c. 12; Eth. Eud. viii. 9; Pol. i. 12.<sup>176</sup> Ll. II.



the man looks to their education. The woman is not intended to serve like a slave; on the contrary, wherever, as among the barbarians, the woman is a slave of the husband, it is a proof of a want of men destined by nature to be masters, and marriage is there only a union of slave with slave. Nevertheless the woman ought to be subject to her husband, for, although she has a will of her own, still it is but weak. On this account, Aristotle considers the relation of the husband to the wife to be aristocratical;<sup>177</sup> while the mutual relation of brothers is one of political equality; but in its general features the family is a monarchy.<sup>178</sup>

A community arises out of the family, as it were, by a planting of houses or colonisation, and it consists of a lasting union of several families. When, however, by the union of several such communities, a society is formed which is able to depend upon itself for the necessities of life, a state arises. Aristotle, therefore, like Plato, ascribes the formation of a state to the weakness of separate communities, and their inability to supply all their own wants. Viewed in this light, the state appears to owe its origin to a calculation of utility;<sup>179</sup> but the object of its formation is not merely its utility and advantage as securing the due supply of all the necessities of life, but also to promote good order and virtuous living, and, consequently, it must consist of a number of upright citizens, among whom

<sup>177</sup> Pol. i. 2, 5, 13, 14; iii. 4; Econ. i. 3; Eth. Nic. v. 10; viii. 12; Eth. Eud. vii. 9.

<sup>178</sup> Pol. i. 7; Econ. i. 1; Eth. Nic. viii. 12; Eth. Eud. vii. 9.

<sup>179</sup> Eth. Nic. viii. 11.

love forms the bond of union.<sup>180</sup> Accordingly, Aristotle distinguishes a state from a people only extrinsically united by the mere circumstance of dwelling in the same country and the simple ties of blood or marriage : for if the latter were a state, then a state might be composed of brutes, or of slaves.<sup>181</sup> Those, therefore, who live in a common country, are not, according to Aristotle, citizens, but those who, according to a just constitution, enjoy rights, and authority, and law ; so that a state can only subsist between freemen and equals, who have formed among themselves a society of law and justice.<sup>182</sup> On these grounds, he gives the name of imperfect citizens to those who, not being slaves and dwelling in such a state, pursue sordid occupations unworthy of a freeman, and, on that account, are rendered incapable of participating in the administration of justice, or political rights,<sup>183</sup> and he even considers them to be in fact and essentially nowise better than slaves.

To form a right estimate of the moral character of Aristotle's Politics it is necessary to distinguish carefully its two principle elements ; viz. what he considers to be absolutely good for a state, and what he deems to be only contingently advisable. As his principle object in the Politics is to show wherein the rational intelligence of the free citizen consists, and as this is always guided by circum-

<sup>180</sup> Pol. i. 2. ἡ δ' ἐκ πλείονων κωμῶν κοινωνία τέλειος πόλις, ἡ δὲ πάσης ἔχουσα πέρας τῆς αὐταρκείας, ὡς ἔπος εἰπεῖν, γινομένη μὲν οὖν τοῦ ζῆν ἔνεκεν, οὐσα δὲ τοῦ εὖ ζῆν. Ib. iii. 1, 9. τὸ δὲ τοιοῦτον φιλίας ἔργον.

<sup>181</sup> Ib. ii. 2 ; iii. 9.

<sup>182</sup> Pol. i. 7 ; iii. 1. 9.

<sup>183</sup> Pol. iii. 1 ; cf. ib. 5.

stances, Aristotle was necessarily driven to examine, as far as possible, all the varieties of existing constitutions, both good and bad, and to show in what manner the wise politician must conduct himself in each. Such a method of investigation Aristotle, however, only approves of conditionally, and he is far from being content with it; but, reflecting that the state has a moral end in view, he labours to show how this may be best attained, and so he follows, not less than Plato, an ideal of political excellence. These two inquiries, however, Aristotle has somewhat carelessly mixed up together; and hence has arisen the confusion and perplexity so often complained of in his *Politics*. Moreover, the former part seems to be treated too much at length, while the latter is very briefly discussed. This, perhaps, is to be attributed to his endeavour to exercise a real influence upon politics, such as they were actually understood, for he says the politician must not consider what is best, but what is practicable, which, without doubt, is invariably to be found intermediate between good and evil.<sup>184</sup> In this direction Aristotle proceeds so far as not only to advance rules for the improvement and stability of imperfect constitutions, but even to offer suggestions to tyrants, oligarchs, and abandoned democrats, as to the manner in which their power may best be sustained; which, in this respect, may have served as a model to Machiavelli.<sup>185</sup> Here, of course, there could not have been any consideration of justice or virtue, but merely of their semblance; and it occa-

<sup>184</sup> *Pol.* iv. 1.<sup>185</sup> *Ib.* v. 8; vi. 2.

sions some surprise to find remarks of this nature occurring in the *Politics* of Aristotle, which, assuredly, were composed with a moral object. Perhaps the ground of this seeming inconsistency was his indisposition to all change, which, he says, the bad only desires.<sup>186</sup> This aversion to change was so great, that he would oppose all political reforms, however excellent, unless gradually introduced. In this respect, he limits the virtue of the citizen to the maintenance of the actual constitution under which he was born and lives, and admits that virtue and justice may differ in different constitutions; it is only in a perfect state, that the virtue of the man and the virtue of the citizen are coincident; in all others the good citizen is not necessarily a good man.<sup>187</sup> So intimately allied in the opinion of the ancients were the virtue of the individual and that of the citizen, even at a time when the blind devotion to any given form of polity was greatly weakened! Nevertheless, it is impossible to ascribe all that Aristotle advances on this head, to his aversion for political change. Much must, undoubtedly, be attributed to his viewing the history of states as a natural development, and, consequently, to a wish to assign causes for the subsistence or decline of every form of political society. In this respect, the *Politics* of Aristotle are very instructive, even though the ideas and views are not always very philosophical; for, in this sense, it can only be regarded as a theory of practical wisdom, and, attaching itself to the more

<sup>186</sup> *Eth. Nic.* vii. 15.

<sup>187</sup> *Pol.* iii. 4, 10, 11 *fn.*, 18.

prevalent forms of Greek politics, presents itself as a mere result of history and experience.

But it now becomes necessary to consider the moral standard of perfection which Aristotle proposes for a state. Even this he views under two aspects, and considers both what is absolutely desirable, and what is attainable under given circumstances.<sup>188</sup> The circumstances, which influence the actual character of a state, arise partly from the number of the people, and partly from the nature of the country, which, as suitable to their wants, they inhabit. But the character of the people is especially to be considered, since it is by this chiefly, that the constitution is determined, although, indeed, both the form of government and the national character is ultimately influenced by the nature of the soil and climate. Consistently with this view, Aristotle asserts most distinctly that a tolerable constitution is only possible among the Greeks. For courage, as the principle of moral desire, and intelligence are indispensable to a good constitution, but the former is wanting to the inhabitants of sultry Asia, and the latter to those of the colder regions of Europe, and, consequently, the Greeks alone, whose country is situated between both, are capable of good political institutions.<sup>189</sup> The mass of the citizens must be determinate both in number, and in quality.<sup>190</sup> The number

<sup>188</sup> Ib. iv. 1. ὥστε τὴν κρατίστην τε ἀπλῶς καὶ τὴν ἐκ τῶν ὑποκειμένων ἀρίστην οὐ δεῖ λεληθῆναι τὸν νομοθέτην καὶ τὸν ὡς ἀληθῶς πολιτικόν.

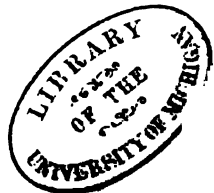
<sup>189</sup> Pol. vii. 7; cf. Probl. xiv. 15, 16. However, the constitution of Carthage is thought deserving of comparison. Pol. ii. 11. This instance proves how closely dependent philosophical research is on experience.

<sup>190</sup> Pol. iv. 12.

of the citizens Aristotle leaves undecided, and confines himself to observing that it must neither be too small to satisfy all the wants of a state, nor too great to be easily overlooked and well administered.<sup>191</sup> In reference to quality or condition, the mass must be divided into classes, bearing a fixed relation to each other, since, without coordinate members, a whole cannot exist. Cultivators of the soil and mechanics are indispensable to a state, since these provide the first necessities of existence; soldiers also to oppose both domestic and foreign foes; rich citizens to bear the expenses of the state; priests to provide for the due observance of religion; and judges for the administration of justice and the maintenance of law.<sup>192</sup> Still it is not absolutely necessary that every citizen should belong to one only of these classes, though no one can belong to all; for it is impossible for the same person to be both poor and rich, and, consequently, poor and rich constitute the two principal divisions of the citizens.<sup>193</sup> In this there is a tacit reproof of the community of goods which Plato proposes for his republic. Among the reasons which Aristotle alleges against its practicability, the most remarkable are, that such an institution would diminish the care of property, which is as necessary to the state as to the individual, since no one takes as much care of public property as of his own; and that it would destroy the virtues of liberality and of modest demeanour towards others. Aristotle says that the wiser institution is, to make property personal, but the benefit of it common, by insuring the right

<sup>191</sup> Ib. vii. 4.<sup>192</sup> Pol. vii. 8; cf. iv. 4.<sup>193</sup> Ib. iv. 4.

sentiments of the citizens.<sup>194</sup> Closely connected with this view, is his controversy against Plato's proposed community of wives and children. For, he argues, such a community of property and of family directly contradicts the very notion of a state, as gradually growing out of the union of several families. The leading principle which Aristotle opposes to Plato is, that the state cannot be conceived of as a strict unity, otherwise it must ultimately be reduced to a single man, who, however, evidently could not be perfectly independent of his fellow-men.<sup>195</sup> If a state is to consist of rich and poor, the principle of certain politicians, that an equalisation of property must be effected, is evidently untenable. Such a measure is evidently impracticable, since it would require for its attainment that the number of children should be limited, which, without great innovation, would be impossible. The true object of the statesman ought to be to attain a middle result, to prevent both extremes, luxury and indigence; and it is of much greater importance to make wants equal than property.<sup>196</sup> But, besides an inequality of fortune, a difference of vocations is advisable. The division of labour is recommended by Aristotle on the same grounds as by Plato, and not merely with respect to the procuring of the first necessities of life, but also to the administration of the state in peace and in war.<sup>197</sup> This observation reminds the reader that Aristotle lived in an age when warfare was reduced to an art and a profession. It is not,

<sup>194</sup> Ib. ii. 3, 5.<sup>196</sup> Ib. 7.<sup>195</sup> Ib. 2.<sup>197</sup> Ib. c. 11.

however, requisite that the people should be similarly divided in every state, for indeed the difference of the population must depend principally upon the form of the political constitution.<sup>198</sup>

The different forms of political society are determined by the nature of its institutions, and particularly by that of the sovereign authority.<sup>199</sup> Now the sovereignty may be vested in one, or in a few, or in the many. Hence arise three species of politics, which, when administered to the interest of the community, are respectively called a monarchy, an aristocracy, and a republic (*πολιτεία*); when, on the contrary, the interest of the ruler or rulers is alone consulted, they are more aptly denominated, tyranny, oligarchy, and democracy.<sup>200</sup> The distinction between the genuine and the corrupt form of these several constitutions of government lies in this, that, in the former, law and justice prevail, and the citizens are willingly obedient, whereas, in the latter, all is ruled and disposed of according to caprice and passions.<sup>201</sup> Aristotle is more in favour of written laws than Plato; and considers their absence as an imperfection in the state; <sup>202</sup> still he is willing to concede to the sovereign power a just authority over the laws, for true justice in a state he makes to be whatever is generally best; <sup>203</sup> still he considers it to be a corruption

<sup>198</sup> Ib. vii. 8.

<sup>199</sup> Ib. iii. 6. *ἔστι δὲ πολιτεία πόλεως τάξεις τῶν τε ἄλλων ἀρχῶν καὶ μάλιστα τῆς κυρίας πάντων.*

<sup>200</sup> Ib. 7; Eth. Nic. viii. 12; Eth. Eud. vii. 9; Rhet. i. 8.

<sup>201</sup> Pol. iii. 10, 11.

<sup>202</sup> Ib. ii. 10.

<sup>203</sup> Ib. iii. 11, 12 in. *ἔστι δὲ πολιτικὸν ἀγαθὸν τὸ δίκαιον, τοῦτο δ' ἔστι τὸ κοινῇ συμφέρον.* Ib. c. 16.



of good policy when human caprice prevails, and not law, according to right reason ; for to acknowledge law as the rule of states is to acknowledge God, as such, but to give the power to man is to give power to the brute.<sup>204</sup> But the above classification of constitutional forms had reference only to the sovereign power, and, consequently, indicated nothing more than its most general varieties. In a state, however, there are many distinct powers, of which Aristotle enumerates three ; first, the deliberative, which, according to Aristotle, is the highest, and decides upon all matters of public interest ; secondly, the elective body, which bestows office and employments ; and, thirdly, the judiciary.<sup>205</sup> These powers may, however, differ greatly in character, and be vested either in the hands of a few, or in the entire people, and so give rise to mixed government.<sup>206</sup> The former division, therefore, indicates the pure, and not the mixed forms. Of the pure constitution, Aristotle considers a monarchy the best, next to which he places an aristocracy, and, last of all, a republic. Tyranny is the direct opposite of monarchy, and is, consequently, the very worst species of corrupt governments ; an oligarchy is less so, while the most tolerable of all vicious forms is a democracy ; for, although it is the opposite of a sober popular control, it is not so much estranged from it as tyranny is from monarchy.<sup>207</sup> In our notice of Plato we remarked that the Greeks were, at this time, indisposed to democratical govern-

<sup>204</sup> *Ib.* 16 ; *Eth. Nic.* v. 10.

<sup>205</sup> *Pol.* iv. 14.

<sup>206</sup> *Ib.* vi. 1.

<sup>207</sup> *Pol.* iii. 7 ; iv. 2 ; *Eth. Nic.* viii. 12.

ment, and strongly leaned towards an aristocracy or monarchy. This tendency is strongly visible in Aristotle. He took a similar view of the aristocratical and the monarchical constitutions; they indicated, to his mind, the supremacy of the good; and, wherever this supremacy is established, there laws and administration are good, whether the authority is vested in one or many.<sup>208</sup> Aristocracy and monarchy are the only governments which dispose of honour and power according to virtue and merit; but the truly virtuous and distinguished are few, except perhaps for military prowess; so that where the authority is vested in the whole people, power is necessarily engrossed by military men,<sup>209</sup> which state of things is neither just nor good. According to this view, therefore, an aristocracy or monarchy is preferred to a popular government, on the ground that a more perfect virtue has rule in the former than in the latter. Aristotle does not seem, however, to have observed this distinction throughout. For he elsewhere makes the principle of popular constitution to be the distribution of power and honour, by the standard of property;<sup>210</sup> and this

<sup>208</sup> Ib. iii. 15, 17, 18; iv. 8.

<sup>209</sup> Pol. iv. 2; iii. 7. *ἕνα μὲν γὰρ διαφέρειν κατ' ἀρετὴν ἢ ὀλίγους ἐνδέχεται, πλείους δ' ἤδη χαλεπὸν ἡκριβῶσθαι πρὸς πᾶσαν ἀρετὴν· ἀλλὰ μάλιστα τὴν πολεμικὴν· αὕτη γὰρ ἐν πλῆθει γίγνεται. διόπερ κατὰ ταύτην τὴν πολιτείαν κυριώτατον τὸ προπολεμοῦν καὶ μετέχουσιν αὐτῆς οἱ κεετῆ- μένοι τὰ ὄπλα.* This is explained in Pol. iii. 17. The *ἀλλὰ μάλιστα τὴν πολεμικὴν* is, generally, incorrectly explained, as asserting it to be especially difficult to attain to greatness by political virtue, whereas it intimates the direct contrary, as is clear from the context and parallel passage. It is necessary to supply from the preceding, *πλείους χαλεπὸν, κ. τ. λ.* before *τὴν πολεμικὴν*.

<sup>210</sup> Eth. Nic. viii. 12. *τρίτη δ' ἡ ἀπὸ τιμημάτων, ἣν τιμοκρατικὴν λέγουσιν*

form of government is also described as a mixture of oligarchy with democracy.<sup>211</sup> According to the latter view, a popular government would not be a pure form, but a mixed government, consisting of two corruptions of state polity. Aristotle is here manifestly inconsistent, and we must confess that his division of the pure forms rests upon a very uncertain principle, and that his idea of popular government is very vague and loose. Perhaps, however, we shall not greatly err in ascribing to Aristotle the following view as the general basis of his political speculations. As the state must pursue justice as its first object, and as justice consists in proportional equality, the chief problem in politics is, to determine what constitutes proportional equality. Now political power may be divided in three ways; according to liberty, property, or virtue; for, in this respect, noble birth has no claim to consideration, being founded merely on riches and virtue, so far as these are inherited. The true and best constitution of government is one wherein respect is had only to virtue; mixed constitutions, such as are called aristocracy, or popular government in a wider sense, result from an undue consideration being given to two or to three

*οἰκείον φαίνεται πολιτείαν δ' αὐτὴν εἰώθασιν οἱ πλείστοι καλεῖν.* Hereto refer also other propositions concerning politics. Pol. iv. 9; vi. 6. It is true that this principle has, in a certain degree, been combined with the preceding, since the 'well off' are the same as the 'Hoplites' (ib. iv. 3); but, according to this, the appearance may be the same, but not the principle; for, in one view, military virtue, in the other property, is made the ground of political power. In popular language, oligarchy is, with Aristotle, a timocracy, Rhet. i. 8.

<sup>211</sup> Pol. iv. 8. *ἔστι γὰρ ἡ πολιτεία ὡς ἀπλῶς εἰπεῖν μίξις ὀλιγαρχίας καὶ δημοκρατίας.* This must be explained by Pol. iv. 3, 12.

of these matters. For instance, wherever all three are regarded, there is an aristocracy in the subordinate sense of the word, but a popular government, when numbers and wealth only are respected. Lastly, corrupt forms arise whenever one only of the two first points is made the basis of political organisation; e. g. an oligarchy, wherever all authority is conceded to wealth, but a democracy wherever the freedom and equality of all citizens is sought to be insured, and number, not character, regarded.<sup>212</sup> But, as Aristotle further saw, that the moral perfection of all the citizens was improbable, if not impossible, he preferred an aristocracy to a popular government, and required of the free citizens that, at least, they should have learned obedience to the more virtuous; that is to say, that although deficient in the knowledge requisite for right practice, they should, nevertheless, possess a due appreciation of good.<sup>213</sup> Indeed he even regards the moral perfection of the majority of the citizens to be impossible, and therefore prefers the sovereignty of one, who, by justice, and the laws of reason, should train his subjects to virtue. It is objected to a monarchy, that, although the individual members of the mass

<sup>212</sup> Pol. iii. 12 fin.; iv. 8. δοκεῖ δὲ ἀριστοκρατία μὲν εἶναι μάλιστα τὸ τὰς τιμὰς νεμεῖσθαι κατ' ἀρετὴν· ἀριστοκρατίας μὲν γὰρ ὅρος ἀρετή, ὀλιγαρχίας δὲ πλοῦτος, δῆμου δ' ἐλευθερία. — ἔπει δὲ τρία ἐστὶ τὰ ἀμφισβητοῦντα τῆς ἰσότητος τῆς πολιτείας, ἐλευθερία, πλοῦτος, ἀρετή· (τὸ γὰρ τίταρτον, ὃ καλοῦσιν εὐγένειαν, ἀκολουθεῖ τοῖς δυσίν· ἡ γὰρ εὐγένειά ἐστιν ἀρχαῖος πλοῦτος καὶ ἀρετή) φανερόν ὅτι τὴν μὲν τοῖν δυοῖν μίξιν, τῶν εὐπόρων καὶ τῶν ἀπόρων, πολιτείαν λεκτέον, τὴν δὲ τῶν τριῶν ἀριστοκρατίαν μάλιστα τῶν ἄλλων παρὰ τὴν ἀληθινὴν καὶ πρώτην. Cf. Pol. iv. 12; vi. 2.

<sup>213</sup> Pol. iii. 4.

may be more ignorant than one, that all combined may make up, by accumulation, a sum of wisdom equal to that of the wisest and the best; and that, on this account, Solon invested the whole body of the people, and not any single individual, with the sovereignty. But what wisdom would the mass possess if they were composed of brute beasts? And many men are no better than beasts. And even if it should be proposed to give authority to the wiser and better-disposed of the citizens, still it would be absurd to say that an ignorant multitude would advise better than a single intelligent individual, for it does not always happen that even many wise men counsel better than a single one. But, besides, a king would surround himself with friends, whose advice and information might supply the defects of his own knowledge.<sup>214</sup> In order to refute the opponents of a monarchy, Aristotle asks what is to be done with a man who is eminent above all others for political wisdom. It would be unjust to put him to death, or to banish him by ostracism; and it would be as monstrous for the mass to take authority over him, as for any one among them arrogantly to wish to dictate to Jupiter; for such a character would be as a God among men, or as a lion among hares; it, therefore, only remains, that all should willingly obey him as an eternal sovereign of the state.<sup>215</sup> Still Aristotle does not deny that there are many difficulties in this supposition of a just monarchy. Such distinguished characters as deserve to be kings are rarely to be found. Painful would it be

<sup>214</sup> Ib. iii. 11, 16.<sup>215</sup> Ib. iii. 13, 17.

to obey a vicious king, or one chosen at hazard ; and, although generally it may be true that virtues are hereditary, still this is not always the case. He is, therefore, against an hereditary monarchy. But would not a king secure his son's succession if he had the power ? Not to do so would be more than human virtue. Moreover, it is dangerous to exclude the multitude from all participation in the power and honours of the state, for this would be to fill the kingdom with domestic foes. On this consideration, therefore, as generally,<sup>216</sup> Aristotle would prefer a mixed constitution. The sovereign ought to possess greater power than any individual separately, and than any body collectively, but less than the whole community. On this account, and in order to insure the stability of the monarchy by moderation, he considers it advisable to place guards by the side of the king.<sup>217</sup>

But the chief merit of Aristotle's politics lies in its invariable observation of the maxim,—that the same measures are not applicable everywhere. In the organisation of a state the character of the citizens is the first point to be considered. For a monarchy, it is requisite that the people should be so constituted as voluntarily to submit to the political superiority and virtue of a particular race ; for an aristocracy, it should show a disposition to yield obedience to virtuous and illustrious men ; while a republic requires a warlike community, capable of governing, and willing to be governed

<sup>216</sup> 1b. ii. 6.

<sup>217</sup> 1b. iii. 15 ; v. 11.

by law, and ready to distribute honours according to merit, even to the poor.<sup>218</sup> But the political character of a people varies according to the nature of its general pursuits. An agricultural and pastoral population is the most suitable for a republic, for such a people being usually of moderate fortunes, and occupied with providing for their immediate wants, is generally indisposed for disorder and change, and not over anxious for political meetings and honours. Wherever, on the contrary, handicraftsmen and hired labourers form the majority of the population, the most extreme and abandoned form of democracy will be found.<sup>219</sup> Whereas the breeding of horses, as riches are indispensable to such a pursuit, is best fitted for the subjects of an oligarchy, to which form of government those who are indisposed for war are for the most part inclined.<sup>220</sup> The variety of soil, too, exercises an influence on the form of government. An acropolis is oligarchical and monarchical; a flat country is democratical; whereas a mountainous country, as affording numerous strong places, is generally aristocratical.<sup>221</sup> These are, evidently, merely matters of detail, which, however, the wise politician cannot neglect. Of a similar nature is the demand which Aristotle makes of different laws and modes of education for different constitutions; with a view to which he advances a variety of precepts, which are of too special a nature to be of any philosophical importance.<sup>222</sup>

Here also, as throughout the moral theory of

<sup>218</sup> *Ib.* iii. 17.

<sup>221</sup> *Ib.* vii. 11.

<sup>219</sup> *Ib.* vi. 4.

<sup>222</sup> *Ib.* vi. 1 *fin.*; v. 9.

<sup>220</sup> *Ib.* 7.

Aristotle, the view predominates that we must be content, in the imperfection of human things, to attain the possible without longing for the best. With this, the other leading view of his ethics is closely connected, that in all things we must strive after a mean, and undergoes, in consequence, an important modification. A happy life is only attainable by our pursuing a virtuous mean; now the political constitution is a species of life—the life of the state; its right administration must therefore direct itself to attain a mean result.<sup>223</sup> But here the same difficulties occur, in determining the true mean, as presented themselves in his Ethics; from which it cannot be said that Aristotle has extricated himself very skilfully. He cuts the matter short by neglecting all consideration of virtue and liberty, and by taking the notion of a mean in this political sense solely in reference to wealth. Such a course, so far as virtue is concerned, can only be justified by his remark, that the mean condition of wealth is better fitted to insure virtue than either extreme of want or of abundance. But he is unable to determine this mean condition of wealth, any otherwise than by opposing both to the extremely wealthy and the extremely indigent members of the state; <sup>224</sup> and the inevitable consequence is, to make

<sup>223</sup> Ib. iv. 11. ἡ δὲ δὴ κρίσις περὶ πάντων τούτων ἐκ τῶν αὐτῶν στοιχείων ἐστίν. εἰ γὰρ καλῶς ἐν τοῖς ἠθικοῖς εἴρηται τὸ τὸν εὐδαίμονα βίον εἶναι τὸν κατ' ἀρετὴν ἀνεμπόδιστον, μεσότητα δὲ τὴν ἀρετὴν, τὸν μέσον ἀναγκαῖον βίον εἶναι βέλτιστον τῆς ἐκάστου ἐνδεχομένης τυχεῖν μεσότητος τοὺς δὲ αὐτοὺς τούτους ὄρους ἀναγκαῖον εἶναι καὶ πόλεως ἀρετῆς καὶ κακίας καὶ πολιτείας. ἡ γὰρ πολιτεία βίος τίς ἐστι πόλεως.

<sup>224</sup> L. 1. ἐν ἀπάσαις δὴ ταῖς πόλεσιν ἐστὶ τρία μέρη τῆς πόλεως, οἱ μὲν εὐποροὶ σφόδρα, οἱ δὲ ἄποροι σφόδρα, οἱ δὲ τρίτοι οἱ μέσοι τούτων. ἐπεὶ τοίνυν ὁμολογεῖται τὸ μέτριον ἄριστον καὶ τὸ μέσον, φανερόν ὅτι καὶ τῶν εὐ-



the natural standard of prosperity to be relative to the wants of the individual.<sup>225</sup> Nevertheless, Aristotle's opinion is, simply, that a legislator will establish the best form of constitution,—not the absolutely perfect, but the most practicable, by insuring to the middle classes a preponderance over both the rich and the poor; if not absolutely, at least, by leaning to them, and insuring to them the supremacy in the state.<sup>226</sup> Whenever this is not the case, the preponderance of the rich will lead to the establishment of an oligarchy, that of the poor to democracy; and, in both cases, the object of a wise legislator will be, gradually to advance the middle classes to political power,<sup>227</sup> in the hope that they will, by degrees, arrive at the sovereignty, and thereby cut off every extreme.

We have now only to cast a glance at the institutions which Aristotle considers desirable for the attainment of as perfect a government as is possible for man to enjoy. The virtue and prosperity of the state, which it ought to be the first object of the legislator to insure, are considered by Aristotle as similar to the virtue and prosperity of the individual.<sup>228</sup> All external advantages, and the good

τυχημάτων ἢ κτήσις ἢ μέση βελτίστη πάντων· ῥάστη γὰρ τῷ λόγῳ πειθαρχεῖν, κ. τ. λ.

<sup>225</sup> See the preceding note; compare also l. l. οὐσίαν — μέσην καὶ ἱκανήν.

<sup>226</sup> L. l.

<sup>227</sup> Ib. 12. δεῖ δ' αἰεὶ τὸν νομοθέτην ἐν τῇ πολιτείᾳ προσλαμβάνειν τοὺς μίσους.

<sup>228</sup> Ib. vii. 1. ἐχόμενον δ' ἐστὶ καὶ τῶν αὐτῶν λόγων δεόμενον καὶ πόλιν εὐδαιμόνα τὴν ἀρίστην εἶναι καὶ πραττουσαν καλῶς. ἀδύνατον δὲ καλῶς πράττειν τοῖς μὴ τὰ καλὰ πράττουσιν. οὐδὲν δὲ καλὸν ἔργον οὐτ' ἀνδρὸς οὔτε πόλεως χωρὶς ἀρετῆς καὶ φρονήσεως· ἀνδρία δὲ πόλεως καὶ δικαιοσύνη καὶ φρόνησις τὴν αὐτὴν ἔχει δύναμιν καὶ μορφήν, ὣν μετὰσχων ἕκαστος τῶν ἀνθρώπων λέγεται εἰκαίος καὶ φρόνιμος καὶ σώφρων. Ib. 2.

gifts both of body and soul, form no inconsiderable part thereof. These external advantages and bodily gifts are the materials of legislation, without which the politician cannot accomplish his task.<sup>229</sup> In the first place, a state requires a population sufficiently numerous to insure independence, and an internal supply of all the necessities of life. The greatness of a state, however, does not consist in its populousness generally, but in the number of its free citizens, and the power which thence results. Now this number must not, as formerly observed, be greater than can be easily watched and over-looked.<sup>230</sup> The next requisite is a country which produces whatever is necessary for supplying all the wants of the citizens. Its territory ought not to be too large, because of the difficulty of defending them; nor rich enough to corrupt the minds of the citizens by pride and sloth. Here, too, a mean is to be observed.<sup>231</sup> A situation partly maritime and partly inland is desirable, as most favourable both for procuring the necessities of life and for security; secondly, in case of war its territory ought to be of difficult approach, with many outlets for retreat. Fortifications are necessary, and also a naval force; but not too large, since a maritime population is little fitted for the duties of government. Moreover, the site and climate must be healthy.<sup>232</sup> The division of labour is indispensable in a state, and, consequently, a population occupied

<sup>229</sup> Ib. 4. ὥσπερ γὰρ τοῖς ἄλλοις δημιουργοῖς οἷον ὑφάντῃ καὶ ναυπηγῇ δεῖ τὴν ὕλην ὑπάρχειν ἐπιτηδεῖαν οὖσαν πρὸς τὴν ἐργασίαν — οὕτω καὶ τῷ πολιτικῷ καὶ τῷ νομοθέτῃ δεῖ τὴν οἰκίαν ὕλην ὑπάρχειν ἐπιτηδεύως ἔχουσαν.

<sup>230</sup> L. 1.

<sup>231</sup> Ib. 5; cf. iv. 11.

<sup>232</sup> Ib. vii. 5, 6, 11.

in different pursuits. Accordingly, it is advisable, in a wise constitution of things, that the agriculturists, the labourers, and the market-people, should be kept formally distinct, as if by the institution of castes, from the military and sovereign classes, on the ground that their pursuits are degrading, and unfavourable to virtue. The free citizens must enjoy leisure for the cultivation of virtue, and the practice of political arts, but the rural and labouring classes may be devoid of such leisure. According to this view, Aristotle would reduce all those classes who are engaged in providing the necessities of life, to a state of imperfect citizenship, or, perhaps, of slavery. The genuine burghers ought to enjoy a sufficiency of income, and be owners of the soil.<sup>233</sup> In the best politics he thinks the soil should be divided into two portions,—into public and private property; the income of the former to be set apart for supplying the expenses of government, the common meals, and the public worship; the other, to be assigned in property to private families. The latter portion he recommends to be again divided into two parts; into that nearest to the city, and that nearest the walls, in order that all the citizens should be of one interest and one opinion in wars with their neighbours.<sup>234</sup> To exclude any of the genuine citizens who possess arms and power, from political authority, is impossible. Political power, therefore, ought to be so divided that the younger citizens should be obedient to the sovereign authority, and defend it in war, whereas

<sup>233</sup> Ib. 9, 10.<sup>234</sup> Ib. 10.

the older, of whom the most aged ought to superintend the public worship, are invested with the political sovereignty. This arrangement is agreeable to nature, since the more vigorous period of manhood belongs to warfare, the more experienced to political deliberation. Such institutions would insure domestic tranquillity, since the younger citizens would not feel disgraced by submitting to the authority of their elders so long as they hoped to arrive, eventually, at the same dignity, and man must learn to obey before he can be qualified to command.<sup>235</sup>

These precepts, however, are only remotely connected with the proper end of political government, the virtuous character and conduct of the citizens. This ought to be the first and immediate object of the legislator. Generally, indeed, politicians and legislators look more to what is expedient than to what is beautiful and good; more to war and disturbance, than to quiet and peace; and on this score they are severely condemned by Aristotle. Their object, he says, is to enlarge the territory, and to increase the number of inhabitants, and not to render the state just and wise. It is a mistaken policy to cultivate the warlike virtues alone, and to exercise them to enslave those who do not deserve such a fate; whereas the only righteous cause of war is, to avoid being reduced to slavery, and to gain those for slaves whom nature intended and adapted for such a condition. Whatever is not at the same time just, is impolitic; and it is a wrong precept which commands men to be gentle only

<sup>235</sup> *Ib.* vii. 9, 14.

towards friends, but savage to enemies. Policy, in such cases, is confounded with the interests of despotism, and what would be denied to be just towards one's self, is exercised without scruple or shame against others. Thus does Aristotle oppose himself to the ambitious aggrandisement of states, and especially censure those who laud and admire the Spartan constitution and policy. Its fruits and tendency had already shown themselves. Wherever the citizens are trained and educated solely for warfare, they are unable to bear peace, and are ruined by it. It is an erroneous opinion that the activity of the state, in contest with foreign powers, is indispensable to its prosperity; for a state ought to possess within itself sufficient occupation for its active powers. War exists only for the sake of peace, and unquiet for the sake of quiet. The virtue of a state does not consist exclusively in the bravery of its citizens, but partly also in justice, moderation, and wisdom; valour and bravery are of use only in war; wisdom, or philosophy, for peace and quiet; but the other two for both peace and war, but chiefly for the former. Consequently, these four virtues ought to be the paramount objects in the designs of the legislator.<sup>236</sup> In this

<sup>236</sup> Pol. vii. 2. ἀλλ' εἰκασιν οἱ πολλοὶ τὴν δεσποτικὴν πολιτικὴν οἶεσθαι εἶναι· καὶ ὅπερ αὐτοῖς ἕκαστοι οὐ φασιν εἶναι δίκαιον οὐδὲ συμφέρον, τοῦτ' οὐκ αἰσχύνονται πρὸς τοὺς ἄλλους ἀσκοῦντες· αὐτοὶ μὲν γὰρ παρ' αὐτοῖς τὸ δίκαιός τε ἀρchein ζητοῦσι, πρὸς δὲ τοὺς ἄλλους οὐδὲν μέλει τῶν δικαίων. Ib. 3. ἀλλὰ μὴν οὐδ' ἀπρακτεῖν ἀναγκαῖον τὰς καθ' αὐτὰς πόλεις ἰδρυμένας καὶ ζῆν οὕτω προηρημέναις· ἐνδέχεται γὰρ κατὰ μέρη καὶ τοῦτο συμβαίνειν· πολλαὶ γὰρ κοινωνίαι πρὸς ἄλληλα τοῖς μέρεσι τῆς πόλεώς εἰσιν. Ib. 7, 14, 15. τέλος γάρ, ὥσπερ εἴρηται πολλάκις, εἰρήνη μὲν πολέμου, σχολή δ' ἀσχολίας. — ἀνδρίας μὲν οὖν καὶ καρτερίας δεῖ πρὸς τὴν ἀσχο-

somewhat Platonising form does Aristotle convey the idea that the object of a state is to cultivate all virtue, and that the end and aim of all true policy is to make the citizens virtuous and obedient to the laws.<sup>237</sup> To the means necessary to such an end, education belongs eminently; in which Aristotle, like Plato, places the true political influence of the state. For the state is only necessary by reason of man's inability either to live or to practise virtue alone, and of his requiring education and the constant guidance of the law in order to attain to a perfect development of his virtue.

With the same specious justice as Plato, Aristotle advises that the state should commence its care of the individual antecedently to his birth. It ought to direct and control marriage, in order to secure a race of children as physically perfect as possible. But Aristotle's proposed regulations, on this head, are confined to the age and the corporeal condition of the parents. The conduct of women during pregnancy ought also to be regulated by the state. A deformed child ought not to be reared; and the number of children ought to be limited; and to attain this he does not consider it a crime to procure abortion; whereas, to kill a child after that it has attained to life and sensation, is highly criminal.<sup>238</sup> Immediately after the birth of the infant its education is to begin; which, in the first place, must direct its care to the body, and through the

λίαν, φιλοσοφίας δὲ πρὸς τὴν σχολήν, σωφροσύνης δὲ καὶ δικαιοσύνης ἐν ἀμφοτέροις τοῖς χρόνοις καὶ μᾶλλον εἰρήνην ἄγουσι καὶ σχολάζουσιν.

<sup>237</sup> Eth. Nic. i. 13.

<sup>238</sup> Pol. vii. 16.

body influence the desires, and through these the reason ; so that education must first of all pay regard to the body, then to the appetites, and, lastly, to the reason.<sup>239</sup> Up to the age of seven, the child ought to be brought up in the father's house, and this period is to be devoted, almost entirely, to the training and rearing the bodily frame, which ought to be inured to hardships and difficulties, and not rendered soft and effeminate. Children ought to be kept as much as possible from intercourse with the slaves, and, above all things, kept from hearing or seeing anything indecent, either in word or act. Up to the age of five, education ought not to be in any degree mental, but from this age to the seventh year they ought to be shown those things which, subsequently, they are to learn. This first period of education is followed by two others, of which the one extends from seven years to puberty, and the other from this epoch to the age of twenty-one.<sup>240</sup> During this time education must be public, and superintended by the state ; for as the state has but one end, all its citizens ought to have a common education.<sup>241</sup> The theory of education is, however, discussed very briefly. Of the difference of the objects to which the two latter periods are to be directed, Aristotle scarcely tells us anything ; and as to the means of education, he does little more than give the opinions of his contemporaries, which, as is his custom, he conveys in

<sup>239</sup> Ib. 15 fin. δὲ πρῶτον μὲν τοῦ σώματος τὴν ἐπιμίλειαν ἀναγκαῖον εἶναι προτέραν ἢ τὴν τῆς ψυχῆς, ἔπειτα τὴν τῆς δόξεως· ἔνεκα μὲντοι τοῦ τοῦ τῆς δόξεως, τὴν δὲ τοῦ σώματος τῆς ψυχῆς.

<sup>240</sup> Ib. 17.

<sup>241</sup> Ib. viii. 1 ; Eth. Nic. x. 10.

unconnected remarks, but treating, at considerable length, of music. Four means of education are usually employed ;—Grammar, Designing, Gymnastics, and Music.<sup>242</sup> Grammar and design serve principally for the wants, but design also to the formation of the taste. Gymnastics train the body, and are conducive to courage. Music, accompanied with singing, so far as it is subservient to education, ought to be encouraged by reason of its great influence on manners, in which respect, however, its application is very narrow. But it has other uses ; it tends to purify the passions of the soul, as is especially the case with tragedy ; and is good for recreation, and for a resource in leisure.<sup>243</sup> The omission of any notice of other means of education in reference to this important object, appears a great defect in the last part of Aristotle's *Politics*. It is, in all probability, incomplete. For, as he looked upon repose and peace as the proper end of life, he ought to have made it a point to show in what manner the rising citizens of the state may be best led to the arts of peace ; viz. justice, moderation, and lastly, also to philosophy. But upon this point he has left little recorded, and this little is confined to the narrow sphere of music ; for he does not employ this term in the wide sense in which Plato used it, to signify the means of forming the minds of the young, and the recreation of the old. Occasionally, indeed, he observes, that the young ought to be taught the more liberal and noble sciences, provided that due care be taken that this be not to such an extent as may prove

<sup>242</sup> *Pol.* viii. 4.<sup>243</sup> *Pol.* viii. 3 seq. ; *Poet.* 6.



injurious to the body, or to the virtue of the soul.<sup>244</sup> But, in general, he has neglected to show in what way the desires may be rightly directed to form the true political virtue.

Accordingly, the Ethics and Politics of Aristotle suggest the idea of a work of which the very head is wanting. We cannot think that the design of Aristotle's Politics, like Plato's, was to point out how men may be best trained to philosophy. In all probability, he thought that he had indicated this fully enough in his Logic and Physics, or perhaps considered it to be a matter alien to politics, since it is the favoured lot of a few only to arrive at philosophy. Still, are not these chosen few the true rulers, the true soul and proper end of the state? And even if it should have been fully shown how men may attain to philosophy, was it not still necessary to point out the connection between the institutions of a state and the formation of philosophy? Even if Aristotle considered it sufficient, for all political ends, to provide for the education of those citizens who are to be trained merely to moderate virtue, we must, nevertheless, censure this pedagogic as defective. In short, under whatever aspect we view it, the Politics of Aristotle appears to be an imperfect work. And, in fact, all the treatises of Aristotle appear in the same light. We may justly compare them with those works of art of which the design is to combine the greatest nicety of detail, with the display of the amplest

<sup>244</sup> Ib. viii. 2 fin. ἔστι δὲ καὶ τῶν ἐλευθερίων ἐπιστημῶν μέχρι μὲν τινος ἐνίων μετέχειν οὐκ ἀνελεύθερον· προσεδρεύειν δὲ λίαν πρὸς τὸ ἐντελὲς ἔνοχον ταῖς εἰρημέναις βλάβαις.

riches of thought, but which, from the very magnitude and complexity of the problem, are unable to attain perfection.

In Aristotle we are struck with the profundity of mind with which he penetrates into the mass of given objects, firmly convinced that rational thought pervades it. To bring this rational thought to light is his object, and with this view he, with great acuteness and penetration, analyses the mass of fleeting phenomena, and, by abandoning himself to the research, he masters all its difficulties. But this mode of inquiry was not adverse to his taking a bold survey of the whole, and to his reducing the results of his separate inquiries into a general body of doctrine; on the contrary, he was led, by his very view of science, to set out from the particular with a view to legitimate it by the more general. How, then, is it, that, nevertheless, he so frequently labours in vain to reconcile, and to reduce to perfect unison, his general principles of science, and its objects, with the rich results of experience? Either his experience could not have been extensive enough, or else his general principles must have been wanting in universality; whichever was the case, both elements of his system have alike suffered. Man has no other stabler and more certain starting-point for his inquiries than phenomena: in these, man has nothing to find fault with, nothing to dispense with. Nothing is more absurd than those speculations which would, as it were, recast and remodel the universe.<sup>245</sup> On the other hand, what is there more important than to attain to the notion and

<sup>245</sup> Met. i. 5; de Cælo, ii. 13. *πειρώμενοι συγκοσμεῖν* of the Pythagoreans.

the essence of a thing, and, starting therefrom, to determine what that is which exists necessarily? What is nobler than reason?—the beginning and the end of all things, in the perfect development of which, so far as this is humanly possible, consists man's whole essence and being? But although, according to this view, all would be brought within the power of reason, which moves all things, experience, nevertheless, forbids us to contemplate all in so perfect a light. Whence, it asks, came the many imperfections of this world? whence the accidents? whence the exceptions from nature's general laws? Whence is it that we, who, as intellectual Greeks, are so far superior to all Barbarians, are forced to live in a community so little regulated by the laws of reason? It cannot be denied that, in this sublunary world, chance rules more widely than rational law; but still this sublunary part is only a small portion of the whole, and scarcely deserving of consideration in comparison with the whole. Aristotle perceived the impossibility of reconciling reason absolutely with experience; accordingly he abandons a part of the world to unreason, and, unhappily, this is the very portion in which man's destiny is cast. The other portion of the universe, however, to which human experience reaches not, nothing hinders us from thinking to be better and more perfect. Aristotle does not allow himself to be deprived, by any speculative ideas, of the results of his experience; and this religious reverence for experience ought to secure him our esteem.

In his view of science, the same spirit prevails as

in his view of active life. He is disposed to recognise all that is most exalted, and the true ideal of a Godhead. This he had learned from Plato; and, accordingly, like his master, he praises the supreme God,—reason, which moves all things, and even descends into the human soul in order to adapt it to truth, and science, and virtue. Nevertheless, he observes with a cool and unimpassioned eye the course of nature, and the vagueness of human morality, and he finds that this ideal is unsuited to man, that the divine comes to us as it were a foreign element, which can scarcely preserve itself amid the constant mutations of life and being. On this account, he makes science itself to be transitory and perishable; virtue is more permanent, but still in its practice subject to the fluctuations of our moving life, and our happiness is dependent on the caprices of fortune. The ideal, therefore, is denied to the actuality of our world, and yet the ideal is nevertheless the true. The observation of these sad truths does not, however, reduce Aristotle to despair, but it is the result of his virtue, that he knows how to find reason in actual life, and to endeavour as much as possible to secure it. He is, it is true, of opinion that man is but a mean and defective creature; still he considers his own existence to be worth enjoying; and his whole endeavour is directed to the laudable aim of living in the best way possible, and not with a vain pursuit of an unattainable ideal, but seizing the actual and the practicable with all his energy.

Plato and Aristotle were long the guides of subsequent philosophers who were unable to stand on

their own authority, and in this respect they have been often compared. It is not as such, that we shall submit them to comparison; for as their names have been the objects of an almost superstitious veneration, so their doctrines have been little understood. The basis of our comparison is the historical point of view which suggests the question, how such a disciple could have been formed by such a master. Still it is deserving of consideration, that divisions have attached themselves to these names, which could not have arisen altogether from ignorance, and must, in some measure, have rested on a vague perception of the peculiarity of these two philosophers. From a different point of view, it has been maintained that the disagreement between them is only apparent, or, at least, that it is only on matters of subordinate interest, and that on all essential points there is unanimity. However conflicting these opposite opinions may be, we must confess that they both partake in some measure of the truth. Aristotle was not so unapt a scholar of Plato as to be unable to perceive the truth which is contained in the greater part of his master's doctrine; nevertheless, he saw that they were distorted by a species of error, which forced him, in his endeavour to get rid of it, to proceed in another route of philosophy. In this respect, then, it is that we must draw a comparison between the two doctrines.

Aristotle's opposition to the Platonic doctrine is principally confined to the explanation it gives of phenomena by the ideas. It is impossible to censure him for regarding the doctrine, that pheno-

mena arise from the mutual relations of ideas in the light of an arbitrary assumption and fanciful conception, especially when we consider how greatly this doctrine was corrupted by Plato's successors. But at the same time, we must admit that Aristotle got out of the difficulty no better than Plato, except in so far as he availed himself of a stricter form of doctrine, without, however, resolving the difficulty itself. For in that he made matter to be the eternal ground of phenomena, or, to employ a more precise expression, as he assumed the existence of an eternal and universal potentiality in nature to oppose phenomena, alongside of the everworking activity of God, he undoubtedly reduced the notion of matter to a precision and generality which it had never before enjoyed, and established thereby a necessary element in human science; but, at the same time, he gave occasion thereby to the oft-repeated complaint, that his philosophy, by making the world eternal and co-existent with God, does not account for all things from one ground or principle. And this complaint is far from being absolutely unjust. For although matter is with Aristotle very subordinate, being throughout conceived to be passive, and altogether devoid of energy, it is made, nevertheless, to be the ground of multiplicity, and to be the occasion of disorderly becoming, which is subject to so many chances and variations; and above all, it is the obstacle to the world's fashioning itself into complete perfection. As then, imperfection does now, necessarily, and will never cease to exist in the world, human science must of necessity be, and ever remain equally

imperfect. It was seen that Aristotle regarded man as so insignificant, as, when compared with all the rest of the universe, to be as nothing. How then, can his science be of greater importance than his own position in the world? It can only be in total ignorance of the general spirit of Aristotle's doctrine, to suppose that its purpose is the attainment of a perfect science. The scientific life of man is very short, indeed the several substances which are the immediate ground of all phenomena are imperceptible, and their essence, by reason of the material elements with which they are combined, cannot be explained; and the series of causes proceeds unto infinity. The science which Aristotle seeks is far from unerring; for in many cases, it is impossible to lay down an unexceptionable law, and we are forced to take for a law that, merely, which usually happens, since the accidental is ever mingling in phenomena, both because nature herself occasionally errs, and because the actions of men do not rest upon any unquestionable principle.

But such admissions are also implied in the general spirit of Plato's doctrine, and, on this score, the only praise that is due to Aristotle is, that he has spoken out more distinctly than his master. Still it cannot be denied that this is connected with a defect of the Aristotelian theory, which, entering deeply into its form, becomes the cause of its distinctive difference from the Platonic. This is nothing else than Aristotle's horror of the ideal, as totally unsuited to man's narrow position in the world. His philosophy considers principally man's particular condition on earth; it purposes nothing

more than a science suitable to this state, whereas the science which Plato sought to establish, was intended to soar high above the narrow limits of earthly relations, and sought to contemplate man, not in his present misery, but emancipated therefrom and enjoying a higher and disembodied existence. Such a flight of speculation was impossible for Aristotle, who with great consequentiality of theory, bound all with matter, since he did not consider the soul to be immortal, nor reason, which is eternal, to be peculiar to man, but to belong, in common, to all. It was natural that, in such a view, the human elements of the universe of things would fall far into the back-ground before the whole. Reason, the best of all that is in man, appears, consequently, to be something arriving from without, and as science and moral virtue are dependent on reason, they are naturally regarded as productions which do not form themselves in man by any natural development, but merely attach themselves to his natural experience and virtue, as that divine element which pervades all things equally, and belongs to nothing exclusively. It is undeniable that a correct view is concealed between this veil of misgiving and mistrust. The manner in which Aristotle combines in the notion of energy, the natural motion with its end, and considers the rational end as the true end of motion, indicates, more clearly than was ever done by any of the earlier philosophers, the supra-sensuous and divine source of freedom in man and in the world. But still we cannot conceal that this truth is very obscurely presented by Aristotle; that the



pervading of the particular by the universal, which is here so evidently implied, is not accomplished without a sacrifice of particular essence, and that the manner whereby, according to this view, the rational is gradually to form itself out of the natural, places too strong a contrast, and an almost magical relation between the two; and that, lastly, Aristotle appears to be strangely at issue with himself, when, on the one hand, he posits particular substance as the only substance, and yet again makes that which constitutes its true essence to be an activity of the universal.

But notwithstanding that Aristotle considers the ideal of reason to be far without the reach of man, he does not withhold from him all knowledge of it. God, the perfect and the true, may be known by man, and if not perfectly, nevertheless in certain general ideas. This, too, constitutes an essential difference between Plato and Aristotle. While the former invested his theory of the divine nature in a mythical garb, Aristotle's indisposition for all such modes of exposition, naturally led him to take a different course. In this two points especially must be noticed. On the one hand, Aristotle was not fully conscious of the principle that God cannot be known in his unity, but merely in the multiplicity of ideas which he comprises, and that consequently, nothing but a few general notions can be determined respecting him. On this point, he is more decided than Plato. He worships reason as the divinity itself, and not like Plato, as its image or type merely. But in pursuing this direction he was necessarily driven to negative conclu-

sions. It is not practical but theoretical reason that is divine. Such a course proves clearly the inadequacy of the position from which it started. We have herein exhibited, on the one hand, Aristotle's habit of thought, which, in matter of science, aspired principally to the ascertaining of certain fixed propositions, as the ultimate results of science; and on the other, the gulf which he opens between the development of practical and theoretical reason. Both these points are consequences of the course of scientific inquiry which prevailed in the formation of Aristotle's philosophy. It has always been a wisdom for the schools rather than for life, and, accordingly, the authority of Aristotle in the schools has even become higher and more lasting than Plato's. But if even here we find Aristotle as unsatisfactory as his master, we must nevertheless regard it as a progress in science that Aristotle should have been able to determine with precision the manner in which God, the immovably good, is able to move the world without being himself moved. His doctrine that God by his attribute of being ever worthy of desire sets in motion the world as capable of desire, serves to clear up a point which Plato could only obscurely intimate.

Consequently, the fundamental principle of the physiology of Aristotle was necessarily the idea of the final cause. It is distinguished from the Platonic physics chiefly in two points; the greater precision and clearness of the idea, and its close dependence on the results of experience. Nature is simply described as developing herself with an art of which she is unconscious, without choice of

means, and without a clear perception of the end. But experience presented to the mind of Aristotle innumerable objects and events which do not appear to owe their origin to the pure idea of the end, and forced him, consequently, to admit of innumerable exceptions from the general law,—mistakes or failures of nature; many objects which are controlled more by matter than by form, and hence the view of Aristotle, that the sublunary world is subject to many fortuitous chances. It is only such a view that could ever have given rise to the opinion that, not only reason, but the soul in general, is the final cause of the natural life. If Aristotle here differs from Plato, it is only owing to his predominant wish to unite, in the closest manner possible, the soul to the living body. Plato had considered the soul, such as it manifests itself at the birth, and subsequently in the body, as an essence properly individual, and, from such a doctrine, it would follow, that the soul might enter indifferently into all bodies and impart to them motion and vitality. Such a doctrine appeared to Aristotle purely arbitrary. The development of the soul, he believed, was inseparably dependent on the body to which it attaches itself, as its perfection,—its form, which, consequently, rules the matter of the body.

But Aristotle's want of an ideal of human life would, naturally, be most felt in the *Ethics*. This is, too, the reason why the *Ethics* of Aristotle have had so little influence, even at the periods when his philosophy was most studied. In the *Ethics*, we lose ourselves amid a mass of particular remarks,

wholly destitute of anything like systematic co-ordination, and it is only in a very remote sense that its results can be said to constitute a whole. The idea of happiness which, with Aristotle, represents the moral end of human conduct, is very indeterminate even in the intention which Aristotle himself gives to the term; for, in fact, perfect happiness seems not to be made for man, if, like Aristotle, we confine our consideration to this earthly life. Nevertheless, we cannot censure him for paying greater attention than Plato to the fixed and determinate relations of man, and the sentiment of moderation which animates all his precepts is truly worthy of admiration. There is, however, great acuteness in the manner in which in the idea of happiness he makes pleasure inseparable from a virtuous activity, and clearly shows that pleasure is the result of this activity. It was only natural, therefore, that he should proceed to maintain, that to insure the happiness of life, not merely the disposition, but also the practice, of virtue is indispensable; and as this practice is dependent on circumstances, there was good ground for his making corporeal and external advantages, as well as those of the soul, the end of human activity. It is evident that the eye of Aristotle took a more comprehensive view of the whole sphere of morals than any ancient philosopher before him; nevertheless, it did not embrace it entire, for he excluded the scientific life from the sphere of activity, properly human, and, influenced by the prejudices of the freeborn Greek, he expresses unqualified contempt for mechanical pursuits. But, even in this

respect, Aristotle is more just than any of his predecessors, since he draws within the sphere of moral appreciation the industrial economy of the father of a family, which he places intermediate in moral worth between the duties of private and those of public life. The antique character of his mind, and his philosophical intuition, are here traceable in his denying, in a moral point of view, the completeness of the private life of the individual ; and, seeing no virtue except in public life, and reciprocally making perfect virtue to be relative to the state. He does, it is true, draw too refined a distinction between natural and moral virtue, but it is, nevertheless, equally true, that he who acts morally is alone capable of forming a just idea of moral good, and that it is only in a morally constituted society that man attains to a high degree of moral development. If, then, Aristotle's moral idea comprises nothing beyond the duties of domestic and public life, it is a consequence of the limitation of his view of morals, which we have just noticed. In the development of his moral idea, Aristotle justly disdained the vague ideal of Plato, and strongly insists on the rule that man ought to act in conformity with circumstances, since the same constitution cannot be fitting for all states alike ; but, at the same time, he is far from being willing to sacrifice the demands of morality to any pressure of circumstances. By attempting to give an exhaustive enumeration of all the possible combinations of circumstances in a state, he seeks to enlarge the moral view and intelligence.

Nevertheless, a great number of these investiga-

tions are involved in great uncertainty. We are constrained to confess, that throughout his whole philosophy, the consciousness of the inadequacy of human knowledge impresses a certain indisposition to come to a conclusion, a certain obscurity in his general thoughts, a certain circumspection which leads him almost invariably to present the results of his researches in a conditional sense, and to make a reserve for the case of a greater perfection of science. We are far from meaning that Aristotle felt any doubt as to the validity of those general truths which form the basis of his doctrine, or that he is censurable for expressing himself with caution; nevertheless, we must declare our conviction that the great efforts which Aristotle made to reconcile all the results of experience with his philosophy, exercised a strong reaction upon his system itself. In this respect, the philosophy of Aristotle is directly the opposite of that of Plato. While the latter neglects experience generally, and especially in physical matters, and is but little occupied with the necessary and the particular in phenomena, and regarding them, as it were, but as secondary and accessory matters, the investigation of which is, at best, but a scientific amusement, he buries himself in the contemplation of the ideal of the beautiful and good; Aristotle, on the contrary, seeks to derive all possible information, as to the supra-sensible, from the most precise and most positive experience. For, in the opinion of Aristotle, reason is not primary, but is gradually formed out of the necessary and natural contingency with which it is invariably associated, so that, in short, the ful-

filment and the true object of science is the real activity and energy of the life of reason. This view constitutes the progress which characterises the philosophy of Aristotle. He has at least attempted to reconcile the reality of life with the demands of reason, by representing this reality as something beyond phenomena, and as the object of intellectual cognition. But the progress of science is intimately dependent upon those accessory circumstances which impede and limit its action; for, on the one hand, these ideal conceptions, which are necessary to reason, and are the conditions of its free flight, are thoroughly checked by them; even though they may remain absolute in the idea of God, a very limited participation in them is all that is conceded to man. Indeed, as matter and becoming are regarded as something eternal in the world, while, however, on the other hand, the eternal reason enters, as it were, from without, into the perfection of natural phenomena, and presents itself almost as something secret and mysterious, the philosophy of Aristotle contains two elements which do not admit easily of being reduced into unity. Wherefore did the world stand in need of an eternal mover, if motion propagates itself from one real being into another, and is unbroken from eternity? What need is there of the divine reason to explain what is actual and real in the world, if the world, ever striving after good, could realise itself out of its own potentiality? These are questions which are not easily answered by the philosophy of Aristotle. If, further, it be observed, that the question as to the foundation of the world in God is completely

evaded, the coexistence of the world with God being posited, without any explanation being given why their coexistence or inexistence was necessary, we must fain admit that the Aristotelian system was little calculated to insure the direct and steady progress of philosophy. Two results only were possible; either to give a more stable grounding to all the elements of the Aristotelian philosophy, and thereby to give a more intimate union to the right estimation of experience, and its realities, and to the supra-sensible idea, the true object of science; or else to develop either one of these opposite elements to the exclusion of the other. Now Aristotle himself evinces a disposition to apply more particularly to experience, and the reality which it presents; and although the predilection of Socrates and Plato for the pure ideas of the intellect is a strong counterpoise in Aristotle himself, it was only agreeable to the natural course of the development of ideas that this counterpoise should become weaker in proportion as it advanced along a beaten track, which extends farther and farther in an opposite direction. The external circumstances to which the Greek mind was, at this period, subjected, contributed greatly to this result. The ideal continued to retire into the background of scientific inquiry, while the mere observation of phenomena prevailed, and the conclusion was, that men forgot that there was anything to investigate in phenomena but the sensible itself.



## CHAPTER VI.

### THE PERIPATETICS.

WE are told that Aristotle, not long before his death, when he was already infirm, was requested by his disciples to appoint a successor whom they might follow after his death. Two of his disciples appeared to him pre-eminently fitted to continue his school; Theophrastus, of Eresos, in Lesbos, and Eudemus of Rhodes. After a little delay, Aristotle asked, at last, for some Lesbian and Rhodian wines, and, after tasting each, he declared that both were truly good, but that, for his part, he preferred the Lesbian. His disciples doubted not that by these words he intended to select Theophrastus for his successor in the school.<sup>1</sup>

Whether this anecdote be true or not, it is perfectly conceivable that Aristotle, in his choice of a successor, should have hesitated between Eudemus and Theophrastus. The authority and writings of both always stood in high repute with the Peripatetics, and if the reputation or talents of Theophrastus were the greater, Eudemus, on the other hand, seems to have adhered more faithfully to his master's theory. Whenever Eudemus is quoted, it is almost invariably, to explain some doctrine of Ari-

<sup>1</sup> Gell. xiii. 5. That 'Eudemus,' ought to be read for 'Menedemus' has been often observed.

stotle's ;<sup>3</sup> he seems to have confined himself to the limits of a commentary, and it is only in a very few points, and mostly of a subordinate value, that he can have deviated from his original.<sup>3</sup> Theophrastus, on the other hand, pursued a more independent course. In those of his writings which treat of the same topics as the Aristotelian, while he only slightly touches upon those points which have been fully discussed by his master, he enters more at large into those which have been neglected.<sup>4</sup> In such a course it is only natural that he should occasionally arrive at results which not only enlarge but also modify the spirit of the Aristotelian doctrine. In general, indeed, the Peripatetic school, from its very commencement, exhibits the same spectacle as the Academic ; opinions are promulgated inconsistent with the views of its founder, and a course of speculation is opened, which follows, partially only, the direction which Aristotle had pursued. To trace these deviations in their chief tendency, so far as our imperfect accounts permit, is our present object. This general view of the Peripatetic school will be sufficient, because it is undeniable that its influence, after Aristotle's death, was neither great nor extensive.

The successor of Aristotle was originally called Tyrtamus, but received the name of Theophrastus for the beauty of his language.<sup>5</sup> However, the style of his extant works, in our judgment, too nearly re-

<sup>3</sup> For instance, *Simpl. Phys.* fol. 29 a ; 201 b ; 279 a.

<sup>3</sup> For instance, *ib.* fol. 44 a ; 94 a ; 242 a.

<sup>4</sup> *Boeth. de Interpr.* p. 292, ed. Basil. 1570.

<sup>5</sup> *Diog. Laert.* v. 38. Other authorities have been collected by Menage.

semples that of Aristotle to justify this reputation for beauty of form.<sup>6</sup> On this point, however, we think it right to defer to the judgment of the ancients, when we consider that his works have not reached us in their original form, and that all we possess of them are a few extracts and fragments in a most corrupt state, and that, generally, they do not belong so much to the domain of art as to that of science. This fame of Theophrastus for eloquence is, to our mind, strongly indicative of the growing tendency of the age to look for rhetorical skill, even in the schools of philosophy. The Peripatetic school, over which Theophrastus presided to a very advanced age,<sup>7</sup> appears to have acquired an outward stability, under this philosopher, who presented to it a garden which he possessed, probably in the vicinity of the Lyceum, for the purpose of holding its meetings in it.<sup>8</sup> From the great number of disciples he is said to have had, it may be supposed that he gave to his master's principles a wide diffusion. There are statements which go to show that Theophrastus, like other philosophers, was exposed to odium and persecution,<sup>9</sup> and forced, for awhile, to leave Athens. Generally, however, philosophy

<sup>6</sup> Comp. Senec. Qu. Nat. vi. 13.

<sup>7</sup> According to Diog. Laert. v. 40. he was eighty-five years old. But in the preface to his Characters he gives his age as ninety-nine, and with this statement other accounts agree. See Menage ad Diog. Laert. v. 47. He is said to have presided for thirty-six years over the Peripatetic school. Diog. Laert. v. 36, 58. This, however, agrees with the first statement of his age, since the latter would make him older than Aristotle. There is, probably, an error in the number; for, according to special statements, he must have presided over the school at least forty-five years. See Clinton, Ann. 8. an. 287.

<sup>8</sup> Diog. Laert. v. 39, 52; cf. Athen. v. 2. p. 186. The garden of Theophrastus is supposed to have been a botanical garden.

<sup>9</sup> They are said to have amounted to two thousand. Diog. Laert. v. 37.

appears to have been gaining in public esteem during his lifetime, and Theophrastus, personally, was highly respected by those in power, both in and out of Athens.<sup>10</sup> He appears, also, to have laboured to enlarge the sphere of the Aristotelian philosophy.<sup>11</sup> Accordingly, his work on the history and causes of Plants, superseded that of Aristotle on the same subject, on account, probably, of its greater richness of matter, since, in scientific method and execution, it is considered by competent judges to be much inferior to Aristotle's treatise on Animals.<sup>12</sup> He wrote also a treatise on Stones and Metals,<sup>13</sup> and, as a pendant to Aristotle's valuable collections on Governments and Constitutions, made a rich compilation of laws.<sup>14</sup> The composition of these works are proofs of the prevalence of that direction to the investigation of facts which Aristotle had given to philosophy. Such also are the "Characters" of Theophrastus, which he himself declares to be a fruit of his own long experience.<sup>15</sup> The work itself may be regarded as a collection of instances, intended to serve as illustrations of ethical doctrines. With all this fondness for observation, Theophrastus applied with great diligence to philosophical inquiries; for he considered it necessary to give a more precise determination to many points of the Aristotelian doctrine. On the whole, however, his deviations from Aristotle do not appear to have been of

<sup>10</sup> Diog. Laert. v. 37, 38.

<sup>11</sup> Ib. 37, 39.

<sup>12</sup> See the edition of Theophrastus by Schneider, vol. v. p. 228 sq.; 246 sq.

<sup>13</sup> De Lapid. in.

<sup>14</sup> Cic. de Fin. v. 4.

<sup>15</sup> Eth. Char. Proœm.

great importance; occasionally, indeed, we can hardly divine the meaning. Of some, it may be conjectured that, in a certain degree, they betoken the spirit which prevailed among the disciples of Aristotle.

As Aristotle had opposed the false elevation of the first members of the Academy, and even his master's pursuit of the Ideal, and therefore given rise to a somewhat cold and, perhaps, low view of human nature and its pursuits, he was far from being fitted to elevate his disciples to that mental enthusiasm by which alone aught great or noble is accomplished in this life, and without which the mind of man is never exalted to a consciousness of the divine. Consequently, however meritorious the industry and observant labours of the Peripatetics may have been, their views of life, and all its nobler energies, were but mean and insignificant. This is obvious enough in the moral theory of Theophrastus. Esteeming highly, like his master, the influence of external things upon human happiness, he taught that they were the only means by which it could be acquired; and, as if he had not, thereby, depreciated virtue enough, he hesitated not to assert, that the life of man is ruled, not by wisdom, but by fortune.<sup>16</sup> How widely from the stern rigour of Plato, who joyfully welcomes death in the hope of its giving him a more perfect science, is he removed, who could utter a complaint that Nature had made life too brief for man to perfect science, in which, consequently, he can never

<sup>16</sup> Cic. de Fin. v. 5; Acad. i. 9. *Spoliavit enim virtutem suo decore, imbecillamque reddidit.* Tusc. v. 9. *Vitam regit fortuna, non sapientia.*

have more than, at most, but a beginning of study.<sup>17</sup> In fact, we cannot feel surprised, in the case of one who is so dependent on the outward advantages of life, that he should be so cold and indifferent to the moral requisitions of man's nature, as to recommend, under very specious pretexts, a selfish abandonment of society, and, in certain positions of life, a contempt for marriage and the relations of parental life.<sup>18</sup> Indeed, it is easily seen that Theophrastus' pretended knowledge of man is nothing more than a partial observation of the weaknesses and the perversities which are to be met with in human society, unrelieved by a lively consciousness of the diviner principles which are within, and actuate the man. It is only in the solitary meditation of the sage, that Theophrastus seems to have found something more noble and creditable to humanity; and, if he was capable of feeling enthusiasm on any subject, it was only for the pleasures of ascetical life that could kindle in him for a moment warmer and more exalted sentiment.

But, even in his views of meditative life, Theophrastus appears to have deviated, though perhaps unconsciously, from his master's doctrine. We are led to this conclusion by an examination of his doctrine of the relation of motion to energy. This doctrine manifestly touches upon the point where

<sup>17</sup> Cic. Tusc. iii. 28.

<sup>18</sup> Hieronym. adv. Jovinian. i. p. 189 sq. ed. Bened. Sapiens autem nunquam solus esse potest. Habet secum omnes, qui unquam fuerunt boni et animus liberum quocunque vult transfert. Quod corpore non potest, cogitatione complectitur. Et si hominum inopia fuerit, loquitur cum deo. Nunquam minus solus erit, quam cum solus fuerit. Porro liberorum causa uxorem ducere, ut vel nomen nostrum non intereat, vel habeamus senectutis præsidia et certis utamur hæredibus, stolidissimum est, etc.

Aristotle has taken his highest flight into the more exalted domain of thought, but where, however, he is least definite and precise. The information we possess of Theophrastus' doctrine on this head, notwithstanding that it is very meagre, clearly shows that he did not fully agree with Aristotle in the idea of motion. It is distinctly established that, in opposition to Aristotle, he ascribed motion to all the categories. This view is, however, explained, inadequately, by the fact that he gave the name of motion to production and decay, or every change of essence.<sup>19</sup> Consistently enough with such a view, Theophrastus also doubted whether every motion or change takes place in time or not, and whether the half must always be prior to the whole; for, he says, there may be a sudden motion, and the whole move at once.<sup>20</sup> This doubt could not have formed itself out of any doctrine of Aristotle's, since in it he must have been looking to a supposed change of essence. Closely connected with this is his doctrine of the relation of energy to motion; for it is evident that he has established a closer relation between these two ideas than was consistent with Aristotle's endeavour to keep separate, by as sharp a distinction as possible, the sensible, and that which is the object of rational intelligence. This is particularly observable in his attempt to controvert the position of Aristotle, that there is no motion in the soul, only energies. In opposition to Aristotle, Theophrastus attempts to show that the soul is moved, although not in space, like body, nor so as

<sup>19</sup> *Simpl. Phys.* fol. 94 a ; 201 b ; *Cat.* fol. 110 a *Bas.*

<sup>20</sup> *Ib.* fol. 23 a ; 233 a. Hereto belongs, probably, fol. 230 a.

to experience similar motions from the body, to those which it originates in the body ;<sup>21</sup> indeed, he distinguishes the motions of the soul into corporeal and incorporeal. Among the former he classed appetites, desire, and anger ; assigning to the latter, judgment and knowledge.<sup>22</sup> In the matter itself, perhaps we might admit that the right is on the side of Theophrastus, for it is clear that Aristotle has not always explained himself on this point consistently with his notion of the soul, but it is likewise certain that hereby Theophrastus has actually overthrown, or at least endangered, his master's definition of the soul. Nevertheless, he might, perhaps, have imagined that the general explanation which he gave of the relation of motion to energy, set him entirely free from this objection. He denied that the idea of motion comprises that of energy, or the idea of energy that of motion ; for, he observed, there is energy and perfection even in things unmoved, and motion is rather to be explained by energy, than energy by motion. At the same time, he admits that there is such an indis-

<sup>21</sup> Them. de Anima, fol. 68 a. Theophrastus is here intended by ὁ τῶν Ἀριστοτέλους ἐξεαστῆς. Ib. fol. 89 b. it stands, Θεόφραστος ἐν οἷς ἐξετάζων τὰ Ἀριστοτέλους. Both passages are rendered alike by Hermolaus Barbarus : Theophrastus in iis libris, in quibus tractat locos ab Aristotele ante tractatos.

<sup>22</sup> Simpl. Phys. fol. 225 a. αἱ μὲν ὀρίξεις καὶ αἱ ἐπιθυμίαι καὶ ὀργαὶ σωματικαὶ κινήσεις εἰσὶ καὶ ἀπὸ τούτων ἀρχὴν ἔχουσι. ὅσαι δὲ κρίσεις καὶ θεωρίαι, ταύτας οὐκ ἔστιν εἰς ἕτερον ἀγαγεῖν, ἀλλ' ἐν αὐτῇ τῇ ψυχῇ καὶ ἡ ἐνέργεια καὶ τὸ τέλος, εἰ δὴ καὶ ὁ νοῦς κρεῖττόν τι μέρος καὶ θειότερον, ἅτε δὴ ἐξωθεν ἐπεισιῶν καὶ παντέλειος. καὶ τούτοις ἐπάγει· ὑπὲρ μὲν οὖν τούτων σκεπτέον, εἰ τίνα χωρισμὸν ἔχει πρὸς τὸν ὕρον, ἐπεὶ τό γε κίνησεις εἶναι καὶ ταύτας ὁμολογούμενον. Simplicius attaches hereto the doctrine of Strato, which evidently was a consequence of this passage of Theophrastus. Cf. Sext. Emp. adv. Math. vii. 222.



soluble bond between energy and motion, that without the former the latter is impossible, and there are certain motions which are also truly energies.<sup>23</sup> Theophrastus seems here to have been looking to the fact, that every motion must have brought to perfection some activity; and that, by motion, something which previously subsisted only potentially, has arrived at actuality. But, in truth, Theophrastus has here mistaken the true Aristotelian sense of the term energy, and confounds it with physical becoming; he assumes the possibility that energy itself may be a becoming, and supposes a perfect becoming, which is an end.<sup>24</sup> This is an important modification of the views of Aristotle, who strove to represent the reason as the end of all things, and the reason itself as without motion and without becoming. But still this was only the natural development of the view which Aristotle received from Plato. Aristotle had employed the idea of energy to form a medium between the eternal and the temporal; it was to approximate the eternal to the temporal and to motion. These, Theophrastus drew still more closely together; indeed, he considered it to be possible that energy should be nothing more than a motion. This gradual advance, in a direction once entered upon, ap-

<sup>23</sup> Simpl. Cat. fol. 77 b. τούτῳ μὲν γὰρ δοκεῖ μὴ χωρίζεσθαι τὴν κίνησιν τῆς ἐνεργείας· εἶναι δὲ τὴν μὲν κίνησιν καὶ ἐνέργειαν, ὥς ἂν ἐν αὐτῇ περιεχομένην, οὐκέτι μέντοι καὶ τὴν ἐνέργειαν κίνησιν· καὶ γὰρ ἡ τελειότης καὶ ἐν τοῖς νοητοῖς καὶ φύσει ἀκινήτοις εἶναι οὐ κεκώλυται. Phys. fol. 94 a. τὴν γὰρ τοῦ δυνάμει ὄντος ἢ τοιοῦτον ἐντελέχειαν κίνησιν. — ἡ γὰρ ἐνέργεια κινήσις τε καὶ καθ' αὐτό. Ib. fol. 202 a. ζητεῖν δεῖν φησὶ περὶ τῶν κινήσεων, εἰ αἱ μὲν κινήσεις εἰσὶν, αἱ δ' ὥσπερ ἐνέργειαι τινες.

<sup>24</sup> Theophr. Hist. Plant. i. 1. ἡ γὰρ τοι γένεσις γενέσεως χάριν ἐστὶ τῆς τελείας.

pears necessary. In Aristotle, however, the thought exhibits itself in such force and vigour as to pervade and give shape to his whole system; whereas Theophrastus follows it out to its remotest consequences, and yet believes that he is still maintaining, in general, the scientific view of Aristotle. It almost seems that the disciple had, in this pursuit, stumbled upon a doubt whether the view of his master concerning the relation between the passive and the active intellect, could still be retained. Nevertheless, the incompleteness of our authorities does not allow us to investigate accurately the nature of this doubt, although we may venture the suggestion that it was grounded on that other view of Theophrastus, that thought also is but motion.<sup>25</sup>

Two other disciples of Aristotle deviated, in like manner, from their master's notion of the soul. Aristoxenus, who was celebrated by the ancients for applying the Aristotelian doctrine of knowledge to the scientific investigation of music, compared the soul to a musical harmony; and for thinking that as the latter is produced by the different relations subsisting between several tones, so, too, the soul is the consequence of the relative arrangement of the different parts of the body; for it is this that produces the movement of the living body, and the soul is to be regarded as nothing more than a certain tension of the body.<sup>26</sup> From this opinion, Dicæarchus, also, appears to have been but little

<sup>25</sup> Them. de Anima, fol. 89 b.; 91 a.

<sup>26</sup> Cic. Tusc. i. 10. Aristoxenus musicus idemque philosophus ipsius corporis intentionem quandam (sc. animam esse); velut in cantu et fidibus quæ harmonia dicitur, sic ex corporis totius natura et figura varios motus cieri, tanquam in cantu sonos.

removed, who introduced into the labours of the Peripatetic school, experimental sciences, and especially geography. He distinctly asserted that soul and reason are not entities, nor aught subsisting of itself, but merely a certain state of the body; a state of animation which accrues to the compound unity of the body, as soon as its parts are once fashioned and orderly disposed by nature.<sup>27</sup> On this ground he denied, unconditionally, the immortality of the soul.<sup>28</sup> It is obvious that these opinions are the legitimate consequences of a misunderstanding of Aristotle's doctrine that the soul is the form of the animated body. These misconceptions, however, clearly indicate the direction in which the Peripatetic school moved; it continually applied itself more exclusively to the sensible.

Palpably and distinctly following this direction, we find Theophrastus' disciple and successor, Strato of Lampsacus, one of the most distinguished of the Peripatetics, who lived for a long time at Alexandria, and instructed Ptolemy Philadelphus,<sup>29</sup> before he assumed the chair at Athens in Olymp. 123. His fame rests rather on the acuteness wherewith he refuted others, than on originality.<sup>30</sup> He is

<sup>27</sup> Sext. Emp. Hyp. Pyrrh. ii. 31; adv. Math. vii. 349. οἱ μὲν μηδὲν φασιν εἶναι αὐτήν (sc. τὴν διάνοιαν) παρά τὸ πῶς ἔχον σῶμα, καθάπερ ὁ Δικαί-  
αρχος. Atticus ap. Euseb. Pr. Ev. xv. 9; Cic. Tusc. i. l. Vim omnem eam,  
qua vel agamus quid vel sentiamus in omnibus corporibus vivis æquabiliter  
esse fusam, nec separabilem a corpore esse, quippe quæ nulla sit, nec sit quic-  
quam nisi corpus unum et simplex, ita figuratum, ut temperatione naturæ vi-  
geat et sentiat. Jambl. ap. Stob. Ecl. i. p. 870. (τὴν ψυχὴν) τὸ τοῦ σώμα-  
τος ὃν ὥσπερ τὸ ἐμψυχοῦσθαι.

<sup>28</sup> Cic. Tusc. i. 31.

<sup>29</sup> Diog. Laert. v. 58. Compare C. Nauwerck de Stratone Lampsaceno.  
Berol. 1836.

<sup>30</sup> Polyb. Exc. Vat. xii. 12. παραπλήσιον γὰρ Στράτωνι τῷ φυσικῷ συμ-

generally distinguished by the surname of "Naturalist." This appellation of itself proves, that little regarding questions of morals, his attention was predominantly directed to the corporeal and the sensible.<sup>31</sup> From several statements concerning the particular doctrines of Strato, it is evident, that of all the Peripatetics, Strato had freed himself most completely from servile dependence upon Aristotle's authority, whose arguments and definitions he submits to an acute and searching examination.<sup>32</sup> These isolated points of his doctrine, however, do not throw a very certain light upon its general tendency, and all that we can clearly see is, that while in his investigations he still attached himself to the head of his school, he nevertheless gave a different solution to the same problems. This consideration will materially assist us to a right understanding of a principal point in his doctrine, on which he is decidedly at issue with Aristotle, of which, however, our information is so vague that it would be perfectly unintelligible if we were not allowed to interpret it by the general and leading character of the Peripatetic school. In-

*βίβηκε· καὶ γὰρ ἐκεῖνος, ὅτ' ἂν ἐγχειρήσῃ τὰς τῶν ἄλλων δόξας διαστῆλαι καὶ ψευδοποιεῖν, θαυμάσιός ἐστιν· ὅτ' ἂν δ' ἐξ αὐτοῦ τι προφέρηται καὶ τῶν ἰδίων ἐπινοημάτων ἐξηγῇται, παρὰ πολὺ φαίνεται τοῖς ἐπιστήμοσιν εὐθεσιότερος καὶ νωθρότερος.* This conjecture is at least favoured by many points in his doctrine; for instance, Sext. Emp. adv. Math. x. 155. Sext. Emp. adv. Math. viii, 13, appears to have afforded a polemic against the Stoics.

<sup>31</sup> Cic. de Fin. v. 5: Ac. i. 9; Diog. Laert. v. 58, 64. Yet in the catalogue of his works, Diog. Laert. v. 58—60, there are several works with ethical titles.

<sup>32</sup> With respect to space and vacuum, Simpl. Phys. fol. 140 b.; 144 b.; 153 a.; 154 b.; 163 b.; as to motion, ib. fol. 168 a.; 191 a.; compare also ib. fol. 187 a.; as to the earlier and later, Simpl. Cat. fol. 106 a.; cf. Stob. Ecl. i. p. 380; Sext. Emp. adv. Math. x. 155.

deed, in our opinion, the only safe proceeding on this head is to connect him not only with Aristotle but also with Theophrastus. The latter had already deviated so far from his master as to consider the energy of the thinking reason to be a motion, and in this he was followed by Strato, who seems to have rested on the fact that the intellect is a potentiality which must be moved to actual activity; for nothing which has not been previously learned by experience can be an object of thought; but that sensation is first moved by the senses, and afterwards moves the intellect.<sup>33</sup> In all appearance, it is in connection with this view, that Strato ascribes to the intellect a special organ,<sup>34</sup> and that he attempts to make the connection between the intellect and the sensuous activity still more close than did Aristotle. This is chiefly seen in that he made the seat of the sensuous perception to be neither the liver nor the heart, but placed it in the intellect;<sup>35</sup> and that he even attributed to the sensuous faculty some share in the action of the

<sup>33</sup> Simpl. Phys. fol. 225 a. καὶ Στράτων δὲ — τὴν ψυχὴν ὁμολογεῖ κινεῖσθαι οὐ μόνον τὴν ἄλογον, ἀλλὰ καὶ τὴν λογικὴν, κινήσεις λέγων εἶναι τὰς ἐνεργείας τῆς ψυχῆς. λέγει οὖν ἐν τῷ περὶ κινήσεως πρὸς ἄλλοις πολλοῖς καὶ τὰδε· αἰεὶ γὰρ ὁ νοῶν κινεῖται, ὥσπερ καὶ ὁ ὁρῶν καὶ ἀκούων καὶ ὁσφραινόμενος. ἐνέργεια γὰρ ἡ νόησις τῆς διανοίας, καθάπερ καὶ ἡ ὄρασις τῆς ὀψιως. καὶ πρὸ τούτου τοῦ ῥητοῦ γέγραφε· ὅτι οὖν εἰσὶν αἱ πλεῖσται τῶν κινήσεων αἰτίαι, ἃς ἡ ψυχὴ καθ' αὐτὴν κινεῖται διανοουμένη καὶ ἃς ἀπὸ τῶν αἰσθήσεων ἐκινήθη πρότερον, δῆλόν ἐστιν· ὅσα γὰρ μὴ πρότερον ἐώρακε, ταῦτα οὐ δύναται νοεῖν, κ. τ. λ. According to Sext. Emp. adv. Math. vii. 222, the Peripatetics distinguish between *διάνοια* and *νοῦς*, as between potentiality and energy.

<sup>34</sup> Plut. de Plac. Phil. iv. 5. (τὸ ἡγεμονικὸν τῆς ψυχῆς) Στράτων ἐν τῷ μεσοφρύφῳ. Tertull. de Anima, 15.

<sup>35</sup> Plut. Fragm. i. 4. ἀναίσθητα γὰρ τὰ λοιπὰ πλὴν τοῦ ἡγεμονικοῦ. The same is given, more briefly and less distinctly, Plut. de Plac. Phil. iv. 23.

intellect, and confounded the latter with the observation of the sensuous phenomena,<sup>36</sup> and thereby was at least near upon resolving all thought of the reason into mere sensuous perception.<sup>37</sup> This view, pursued with little acuteness, would necessarily lead Strato to a very different form of doctrine from Aristotle's; for if intellectual thought be a motion, it is impossible to suppose the existence of an unmoved thinking being as the ground of all mundane developments; consequently, he taught that there does not exist any immutable being which subsists independent of and extrinsecal to the system of natural things, and conceivable only by the intellect; but, according to the principles of Aristotle himself, all must belong to nature, which is everywhere in motion, and is the ground of all motion. In this way, then, Strato was inevitably led to an explanation of everything by nature, without requiring anywhere the intervention of a Deity, who, himself unmoved, sets the world in motion.<sup>38</sup> This

<sup>36</sup> Plut. de Solert. An. 3. Στράτωνός γε τοῦ φυσικοῦ λόγος ἐστὶν ἀποδεικνύων, ὥς οὐδ' αἰσθάνεσθαι τοπαράπαν ἄνευ τοῦ νοεῖν ὑπάρχει· καὶ γὰρ γράμματα πολλάκις ἐπιπορευόμενα (vulg. —ομένους) τῇ ὄψει καὶ λόγοι προσπίπτοντες τῇ ἀκοῇ διαλανθάνουσιν ἡμᾶς καὶ διαφεύγουσι πρὸς ἐτέρους τὸν νοῦν ἔχοντας.

<sup>37</sup> Sext. Emp. adv. Math. vii. 350. οἱ δὲ αὐτὴν (sc. τὴν διάνοιαν) εἶναι τὰς αἰσθήσεις, καθάπερ διὰ τινων ὁπῶν τῶν αἰσθητηρίων προκύπτουσιν ἢς στάσεις ἤρξει Στράτων.

<sup>38</sup> Cic. Acad. ii. 38. Negat opera deorum se uti ad fabricandum mundum. Quæcunque sint, docet omnia esse effecta natura, nec ut ille, qui asperis et lævibus et hamatis uncinatisque corporibus concreta hæc esse dicat, interjecto inani. Somnia censet hæc esse Democriti, non docentis, sed optantis. Ipse autem singulas mundi partes persequens, quicquid aut sit aut fiat, naturalibus fieri aut factum esse docet ponderibus et motibus. De Nat. D. i. 13. Strato — qui omnem vim divinam in natura sitam esse censet, quæ causas gignendi, augendi, minuendi habeat, sed careat omni sensu et figura. Against the atomic doctrine refers also Sext. Emp. adv. Math. x. 155.

conclusion Strato seems to have considered to coincide with Aristotle's doctrine, that motion is from eternity, and eternally propagated. It may perhaps be said that, in this wise, Strato conceived of Nature as of a God, and considered it as the ground at once of matter and of form; and it must be confessed, that this would, apparently, give a greater unity to the theory of the universe than was the case with Aristotle's system. But Strato seems to have gone further; and to have denied to his God, or Nature, the life and soul of an animal;—i. e. sense and sensation, and generally, (if we do not err,) whatever Aristotle understood by form or notion, in the proper sense of the word.<sup>39</sup> It is evident that he looked upon Nature as an unconscious ground of things, as matter having in itself the potentiality of, and an impulse to, form, and able to reproduce, in its more perfect creatures, this form, and with it soul and intelligence. An occasion to this doctrine was certainly afforded by Aristotle's doctrine that Nature, although it has ends in view, is unconscious in its operations; and with this opinion Strato probably combined also the dynamico-physical interpretations of Aristotle, so far, at least, as they regarded warmth and cold

<sup>39</sup> Seneca ap. August. de Civ. D. vi. 10. Ego feram Platonem aut peripateticum Stratonem? alter fecit deum sine corpore, alter sine animo. Cic. de Nat. D. l. l. *Figura* appears to designate the *εἶδος* or *μορφή* of Aristotle. Plut. adv. Colot. 14. *τελευτῶν τὸν κόσμον αὐτὸν οὐ ζῶον εἶναι φησι, τὸ δὲ κατὰ φύσιν ἔπαισθαι τῷ κατὰ τύχην· ἀρχὴν γὰρ ἰνδιδόναι τὸ αὐτόματον, εἴτε οὕτω περαινεσθαι τῶν φυσικῶν παθῶν ἕκαστον.* The emendation of Tennemann, *τῷ δὲ κατὰ φύσιν ἔπαισθαι τὸ κατὰ ψυχὴν*, is very plausible: but no change is required, if only we ascribe to Plutarch a previous exposition of the doctrine of Strato.

to be the active agents in bodies.<sup>40</sup> On the other hand, Strato was greatly indisposed to the Atomistic mechanics. Moreover, in a critical estimate of Strato's physiology, it is important to bear in mind that, in all probability, he steadily adhered to the Aristotelian doctrine of the eternity of motion, and that, therefore, when he derived Nature from matter, he considered this matter as already in motion, and possessing, in motion, a certain form. A purely material Nature, as a substratum of all things, exists not, according to this, except in the conception.

It is remarkable that Strato also differed from the earlier Peripatetics in that he bestowed little attention to natural experiments, and in general neglected all historical knowledge.<sup>41</sup> His endeavours seem to have been confined to establishing some general principles for the study of nature, and hereby one rich source of speculation for the Peripatetic school appears to have been dried up. The age of Strato and his followers was in general unfavourable to the union of philosophy and experimental science. After that the first Peripatetics had explored whatever could be gained for science by means of experience, all zeal for this course of inquiry gradually abated. The ultimate limit of this direction appeared to have been reached, and men were content with the results already ascer-

<sup>40</sup> Plut. de Primo Frig. 9; Sext. Emp. Pyrrh. Hyp. iii. 32; Stob. Ecl. i. p. 298; Simpl. Phys. fol. 163 b. The reference of the activities to the *ψυχῆς* and the *πνευματικῶν* is a close approximation. Cf. Plut. de Plac. Phil. v. 4.

<sup>41</sup> See the Catalogue of his works. Diog. Laert. vii. 58—60. Two works only appear to have entered into details of experience. In which, however, there is nothing of importance for the history of philosophy.



tained. Accordingly, under the guidance of Lycon, Ariston of Ceos, of Critolaus, and others, the successors of Strato, the Peripatetic school appears to have taken a new direction. We are told that they were unable to do more than invest with rhetorical ornament certain philosophical common places;<sup>42</sup> and all we know of their doctrines is, that they were confined to ethical questions, which, however, they were far from discussing in the spirit of Aristotle's theory.<sup>43</sup> That, in consequence, the Peripatetic school should fall into disrepute, and after Strato find little countenance, cannot occasion surprise, since the character of the Aristotelian Ethics itself is so little marked and decided that it has never excited a great influence on the moral opinions of mankind.

<sup>42</sup> Strab. xiii. p. 124.

<sup>43</sup> Cic. de Fin. v. 5, 8. Compare also other passages, where the Ethics of the later Peripatetics is alluded to. Clem. Alex. Strom. ii. p. 415; Stob. Ecl. ii. p. 56. See especially, ib. p. 242, sqq. I here follow Petersen, (see Berl. Jahrb. für wiss. Krit. 1836, p. 561), who has rightly observed that, in this passage, the doctrine of Aristotle is not pure, but greatly modified by the Stoical ethics. Critolaus is considered as the author of it. Petersen here offers conjectures as to the mode of supplying the gaps in the list of the Peripatetics.



# HISTORY OF PHILOSOPHY.

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## BOOK X.

### HISTORY OF THE SOCRATIC SCHOOLS.

#### PART IV.

#### THE SCEPTICS AND THE EPICUREANS.

##### CHAPTER I.

##### THE SCEPTICS.

BEFORE we proceed to consider the shape which the Aristotelian philosophy gave to the further development of Greek philosophy, a few minor points must for a while occupy our attention. In this period of our history, we meet with a mass of isolated phenomena, of which the greater part at least must be ascribed to a corruption of philosophy. This circumstance constitutes the difference between the mature age of philosophy and its youthful energy. It would almost seem that humanity cannot evolve itself without these phases of opposition, this antagonism, within its own activity; it lives in a perpetual warfare with itself, sometimes more openly, sometimes more secretly; and it cannot thrive without some object of strife and dispute. The only difference between its youth and its maturity is, that in the former the good and evil are closely and indistinguishably mixed together in the same phenomena; whereas in the latter the evil stands out distinctly and clearly, and is marked with so fixed and determinate a character, as to

be easily separable from the good. In no age of the world has the good ever been strong enough to check the contemporaneous growth of evil. In fact, if we were at liberty to assume that the development of science is independent of outward circumstances, being neither advanced nor impeded by human chances or passions, it would be difficult to understand how ancient errors, which long since seem to be refuted by a more vigorous development of science, nevertheless show themselves again, and establish themselves, not merely in a few weak minds, which are far behind the general enlightenment, but, even deriving fresh force from the mental progress of the age, gain a general and extensive concurrence. It is a painful truth, that the wishes and passions of men exercise a powerful influence on their opinions; where their heart is, there is their treasure. Where they seek, there they find, or at least believe they find. Accordingly, we feel no surprise at the fact, that errors closely resembling those sophistical efforts, which Socrates and his faithful disciples laboured so earnestly to refute, should again prevail in the times immediately after Aristotle. For what, in truth, was the character of these times? Even Aristotle had survived the fall of Grecian liberty; nevertheless, if he showed himself favourable to monarchy, it was to one which declared itself to be Grecian in its character, and observant of law and established rights. It was only in the latter years of his long life that he experienced those troubles which are consequent upon a dynasty founded on arms. But the men of

whom we have now to treat, grew up amid these times of war and troubles, which partly prepared, partly led to the decline of legal and national authority in Greece. In these times, almost everything was decided by the chance of war; and assassination and fraud were regarded as the ordinary and legitimate means of acquiring power, of which the possession was as uncertain as it was dazzling. Bearing then in mind, that the best points in the moral character and habits of the Greeks had their root in political feelings and associations, we naturally expect to find in these times an utter depravation of morals pervading, with a few individual exceptions, the whole Greek nation, which the olden spirit of liberty and patriotism only faintly resisted in a few obscure localities. The corrupting influence of political depravity extended itself to domestic life; for man had not yet been taught to reflect and feel that, although virtue is of no avail in public life, it is, nevertheless, his duty to practice a quiet and unobserved morality in private. Rightly to understand the spirit of these times, two circumstances require notice. The intercourse, first of all with the Barbarians of the North, and subsequently with the effeminate nations of the East, into which the Greeks were brought by their relations with the Macedonians, introduced into the Greek character a degree of cruelty and ferocity to which it had hitherto been a stranger; and a mixture of liberty and servilism, which, considering ancient opinions, necessarily proved injurious to a due estimate of the rights of humanity. To this also the tyrannies which were

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established in Greece Proper contributed, as well as the ascendancy which the rude piratical Ætolians now acquired. The other point to be noticed is the growing refinement of the arts of life, which were now *moré* and more exclusively devoted to the service of luxury. This age was rife with inventions both in the mechanical arts and in those pursuits which are subservient to the comforts, the embellishment, and the luxuries of life. While property was uncertain, what could the present proprietor do better than to enjoy the advantages which it still afforded him? The means of enjoyment were not wanting; these even the preceding age had prepared and furnished. The pleasures of the table were carried to a degree of refinement and excess never before attempted; cooks were now held in great estimation and demand; the courtesans in higher repute than ever; and buffoons and jesters for the amusement of kings, courtiers eagerly sought after, and rewarded with honours and wealth. Art was no longer called upon to furnish its glorious creations for the grand and solemn celebration of public festivals, nor to read the people bitter satires on its own fickleness, or on the vices of its leaders; more supple, more complaisant, it now adapted itself to lighter amusements, or the drunken humour of the rich and powerful. The new comedy, which may be taken as characteristic of the artistic spirit of this age, too complying and too spiritless to awaken in the mind of the spectator contempt and shame at his own follies, sought only to gratify and amuse the more delicate and fastidious, who, although it offends

them either to see or to hear of the weaknesses of humanity, rejoice, nevertheless, to suspect and divine them.<sup>1</sup> By such a state of things philosophy could not long remain uninfluenced, since it must ever modify itself by existing circumstances, either by opposing their evil tendency, or by compromising its own dignity and conforming to them.

We think it advisable to notice a few points of the history of Athens in particular, which long after its political decline continued the chief seat of philosophy. Athens was now almost entirely at the mercy of foreign powers, who left to the city little more than the semblance of liberty. After the death of Alexander it made, it is true, a feeble and ill-timed effort to free itself by the means of Macedonian gold from the Macedonian yoke; but the Lamian war destroyed for ever its independence, or, at all events, its political importance. The degradation of Athens was now complete. The Macedonian garrison in Munychia possessed all power; the poorer citizens, more than half of the inhabitants, were driven out, and a sort of aristocratical government established, which, although it had Phocion for its head, was nevertheless so contemptible that Xenocrates rejected the citizenship as a disgrace.<sup>2</sup> Matters became still worse when, after the death of Antipater, the exiles returned, and the semblance of a democracy was substituted for the shadow of an aristocracy.<sup>3</sup> Demetrius Pha-

<sup>1</sup> Even Aristotle praises it in this sense. *Eth. Nic.* iv. 14.

<sup>2</sup> *Plut.* v. *Phoc.* 29. Zeno and Cleanthes also refused to become Athenian citizens, but the reason assigned is very different. *Plut. de Stoic. Rep.* 4.

<sup>3</sup> At least the constitution now assumed a more democratic form, since the civil qualification was reduced one-half.

lereus, who had formerly been leagued with Phocion, a learned man and a Peripatetic philosopher, supported by the power of Cassander, was now vested with authority. That he embellished and improved the city we are far from denying; but his administration, like his eloquence, was without dignity. The Athenians had become accustomed to flatter their rulers, while the stage was degraded to pandering to the lust of the people: the magnificence of the olden buildings appeared extravagance to Demetrius, who refused not to lavish immense sums on sumptuous festivals, and by every lure and blandishment encouraged vice to show herself in utter shamelessness.\* The example of such a man could not but exercise a pernicious influence on the morals of the Athenians, dazzled at once by the splendour of his power, and by oratorical powers improved by learning and philosophy. But we are compelled to confess, that in the Athenian character little remained to be corrupted. How far lost they were, was strikingly shown when, upon the flight of Demetrius, another Demetrius, surnamed the taker of cities (*Poliorcetes*), entered Athens, which the refinement of its sensual enjoyments, the wit and flattery of its citizens, and the arts and elegance of its courtesans, long rendered his favourite residence. To him the Athenians sung the infamous *Ithyphallus*, expressing openly and without remorse the grossest impiety towards the Gods. "The other Gods are far off, or have not ears; or perhaps they are not, or else they do

\* *Athen.* xii. 60, p. 542. Compare H. Dohrn *Commentatio Historica de Vita et Rebus Demetrii Phalerei Peripatetici*. Kilim, 1825, 4to.



not trouble themselves in the least about us; but thee we behold present, not a god of wood or of stone, but a true God." To gratify this Demetrius the holy rites of the mysteries were violated, twice were the names of the months changed with a ridiculous subtlety, in order to save the appearance of ancient custom. Then was the temple of the maiden goddess Minerva profaned with the most disgraceful pleasures, and as if it was not enough to worship Demetrius himself as a God, temples and altars were also raised to his courtesans and parasites. So great was the prostration of the Athenians, that they at last excited the scorn of the frivolous and wanton Demetrius. "In my time," he said, "there is not one Athenian of great and noble mind."<sup>5</sup> The only palliation of the conduct of the Athenians is the fact, that other cities, Sicyon and Argos, flattered Demetrius in like manner. To philosophy, moreover, Demetrius does not seem to have been well disposed; on the contrary, it was during his supremacy at Athens, that the famous edict was published which shackled the freedom of philosophy, and drove most of its teachers into exile.<sup>6</sup> The law, however, only continued in force for a year; the habits of the age,

<sup>5</sup> Athen. vi. 62, 63 p. 253; Plut. v. Demetr. 26.

<sup>6</sup> Diog. Laert. v. 38; Athen. xiii. 92 p. 610; Pollux, ix. 42. Demetrius could hardly have been the author of this law; for he was a friend of the philosophers and the disciple of Theophrast, who was by the law driven from Athens. Theophrast, moreover, is the only philosopher who is mentioned by name as suffering by the law. It falls therefore, in all probability, after Ol. 116. 2, when Xenocrates died, and before Ol. 118. 3, when Epicurus began to teach at Athens. Supposing it to have been approved of by Demetrius Poliorcetes, it would fall in Ol. 118. 2. It is probable also, on this account, as being, in that case, directed against the friends of Demetrius Phalereus.

which longed not merely for sensual enjoyment, but also for refined enlightenment, rendered the cultivation of literature and science indispensable.

The history of Athens becomes, from this date, still more complicated. Rampant and ignorant demagogues, flatterers of Demetrius, such as Stratocles; or tyrants, such as Lachares, were alternately in power according as victory fluctuated between the armies of Demetrius or Cassander. Three considerations, however, still supported the declining glory of Athens, and contributed to put off its evil day. In the first place, her ancient prowess and valour were not yet forgotten, and the remembrance of them, while it procured her the command of the Grecian armies against the Gauls, withheld her from joining the Achæan league at the sacrifice of her claims to pre-eminence, and, in her later days, inspired the Roman generals with respect and compassion for her fate. In the second place, the unrivalled art and skill by which Athens gratified the more refined tastes, attracted numberless strangers to Athens, and detained them within her precincts. And, lastly, the schools of philosophy, of which Athens was the seat, still sustained her olden renown. The latter two are, in fact, but one, for, at this period, elegance and luxury were closely associated with scientific culture. Athens was the principal seat of the liberal enlightenment of the age; for whatever was effected in science and art at Alexandria and elsewhere, had the colour of laborious, not to say pedantic erudition; whereas the scientific and literary labours of Athens were the issues of a real want and

passion. These labours, however, assumed different directions, as is always the case in times which are not totally devoid of intellectual energy, but have, nevertheless, lost that self-confidence and vigour which arises from the unity of its efforts. Some sought to set themselves in opposition to the growing corruption of the times, and to seek peace in resignation, or a retirement within themselves. The Stoics, whom we shall presently become acquainted with, may stand as the representatives of this class; while the new comedy, which courted favour by its indecent representations, and its light sallies, may be taken as characteristic of another class, who gave free scope, and abandoned themselves to the pursuit of pleasure and enjoyment. In strict alliance with the writers of the new comedy, were the courtesans of the age, who sought to rivet the bonds of their admirers by all the charms of elegance and wit; these accomplishments they drew from the comedy, and the scientific enlightenment of the age; and as this was intimately allied with philosophy, they were constant in their attendance in the philosophical schools.<sup>7</sup> That to every enlightened mind philosophy had now become a want is manifest, as well from its cultivation by the courtesans, as from the fact, that all the statesmen of the age, with the exception of the few who rose to greatness in arms, were educated in the schools of philosophy. At this period, philosophers were regarded as the best orators; and, on this account,

<sup>7</sup> Several courtesans are known to have cultivated philosophy; namely, Nikarete of Megara, who heard Stilpo; Leontion, and many others, who frequented the Garden: of the female disciples of Plato we spoke on a former occasion. As a general fact, we appeal to Athen. xiii. 46. p. 583.

commonly employed on embassies and other missions.<sup>8</sup> This naturally gave rise to a desire to make philosophy agreeable to the multitude ; and this was effected in a variety of ways. Indeed, a tyrant of Sicyon took such delight in philosophical debates, that, forgetful of danger, he publicly mingled with the philosophers in the market-place, where he fell, at last, by the hand of one of their disciples.<sup>9</sup>

Such were the external circumstances which at this period co-operated in working an evil influence on science. But the previous development of philosophy contained the germs of all its subsequent corruptions. Plato and Aristotle, while they laboured to do justice to all the elements of the early philosophy of Greece, had opposed the evil tendency of the Sophists, without, however, being able to overcome it. The smaller Socratic schools still retained a certain spirit of sophistical disputation, a low and mean view of science and of life ; and these relics of a sordid and perverted ingenuity only waited for a favourable season to shoot up again with fresh force and vigour. The Cyrenaic school still nourished the doctrine of self-love, and the pursuit of pleasure ; while the Cynics fostered a contempt for the decencies and requisitions of social life ; and the Megarians devoted themselves to idle and trivial disputation, and gave rise to another set of teachers occasionally mentioned un-

<sup>8</sup> Instances are readily found. I shall only mention the mission of the three philosophers to Rome on the plundering of Oropus ; that of Xenocrates to Antipater, after the Lamian war, and to the part which the Peripatetics, Athenion, or Aristion, and Apellicon, took in the Mithridatic war.

<sup>9</sup> Plut. v. Arat. 3.

der the name of Dialectici, who kept alive the national passion for subtle questions and acute solutions. At the same time, Democritus had his followers, who, with the atomistic theory, propagated its atheistic principles, its sensualism, and universal doubt. Out of these various elements were evolved the doctrines which, in this period, we have to characterise as unphilosophical.

The first school of this kind was that of the Sceptics. Its head was Pyrrho of Elis, of whose life and opinions we are far from possessing a satisfactory account. He is said to have been of poor parentage, and originally a painter; he afterwards served in the army of Alexander, whom he followed as far as India.<sup>10</sup> On his return to Greece, Pyrrho set up as a philosopher, probably at Elis.<sup>11</sup> His doctrine is usually referred to two principal sources,—the Dialecticians, who were nearly allied to the Megarian school, and Democritus. Of the former, one Dryson, or Bryson, is named as his teacher,<sup>12</sup> and he also appears to have been intimately acquainted with Philo the Dialectician,<sup>13</sup> and he is praised by his disciple Timon as invincible in dispute.<sup>14</sup> But the philosopher whom Pyrrho mentions most frequently is Democritus, whose writings, he says, first attracted him to philosophy, and were the subject of his philosophical conversation with Anxarchus of Abdera, his companion in

<sup>10</sup> Diog. Laert. ix. 61, 62; Aristocles ap. Euseb. Pr. Ev. xiv. 18.

<sup>11</sup> Diog. Laert. ix. 64, 69, 109. He might, perhaps, continue the school of Phædo.

<sup>12</sup> Diog. Laert. ix. 61; Suid. s. v. Πύρρων; s. v. Σωκράτης. Menedamus, also, is here named among his teachers.

<sup>13</sup> Diog. Laert. ix. 67.

<sup>14</sup> Aristocl. l. l.

arms, and an ardent admirer of the scepticism of Democritus, and of his theory of happiness.<sup>15</sup> In the Gymnosophists of India, moreover, he saw, perhaps, an example of asceticism worthy of imitation; <sup>16</sup> and if his school pretended to the authority of Socrates for its doctrines,<sup>17</sup> this claim must have rested on the purely practical view with which it professed to know nothing. The several anecdotes of Pyrrho's life, which are undoubtedly greatly exaggerated, clearly prove, at least, that he strove to make himself perfectly independent of all outward things.<sup>18</sup>

As Pyrrho left behind him no written account of his philosophy,<sup>19</sup> we can only judge of his doctrines by the statements of others. The most credible, and, at the same time, the most circumstantial witness to his opinions, is Timon of Phlius. This person is said, in his youth, to have been a choric dancer; afterwards, he devoted himself to philosophy, which he studied, at first, under Stilpo of Megara, and, subsequently, under Pyrrho at Elis.<sup>20</sup> The coolness and self-possession of Pyrrho excited the admiration of Timon,<sup>21</sup> whom antiquity regarded as the best interpreter of the Pyrrhonic doctrine.<sup>22</sup> Like many others of the later Sceptics,

<sup>15</sup> Aristocl. l. l.; Diog. Laert. ix. 61, 63; Numenius ap. Euseb. Præp. Ev. xiv. 6; Sext. Emp. adv. Math. vii. 48, 88.

<sup>16</sup> Diog. Laert. ix. 61, 63.

<sup>17</sup> Cic. de Orat. iii. 17.

<sup>18</sup> Compare Plut. de Prof. in Virt. 11; Aristocl. l. l.; Diog. Laert. ix. 62, 66, 68.

<sup>19</sup> Diog. Laert. Proem. 16; ix. 102; Aristocl. l. l. He is said to have written nothing but a poem addressed to Alexander, which was richly rewarded. Sext. Emp. adv. Math. i. 282; cf. Plut. de Alex. Fort. i. 10.

<sup>20</sup> Diog. Laert. ix. 109; Aristocl. l. l.

<sup>21</sup> Diog. Laert. ix. 65.

<sup>22</sup> Sext. Emp. adv. Math. i. 53. ὁ προφήτης τῶν Πύρρωνος λόγων.

he appears, however, to have followed medicine in addition to philosophy.<sup>23</sup> After the acquisition of much money in Chalcedon, by arts similar to those of the Sophists, Timon abandoned his philosophical speculations, and gave himself up to a life of ease in Athens, where he attained to a great age.<sup>24</sup> He left behind him several works, a few in prose, but chiefly poems of different kinds,—comedies, tragedies, and other works.<sup>25</sup> Of these, his ‘Silli’ are particularly famous, and have gained him the surname of ‘Sillograph.’ In these, particularly, he reviled the philosophy of ancient and modern times, and sought to refute their dogmas; but his scepticism is, likewise, traceable in others of his poems. After his death, although there still lived sceptics, nevertheless, no determinate school of scepticism subsisted.<sup>26</sup> The new Academy may, perhaps, have deprived this doctrine of all its influence.

The tendency of scepticism is expressed in the end which Timon ascribes to all philosophical investigations. This is of a practical nature, for philosophy ought to lead man to happiness. On this account, Pyrrho is generally classed with those Socraticists who directed their attention exclusively to morality, and would allow no other end

<sup>23</sup> Diog. Laert. ix. 109.

<sup>24</sup> Diog. Laert. ix. 110, 112; Athen. x. 51. p. 438.

<sup>25</sup> Diog. Laert. ix. 110. But nothing is found but a fragment in prose. Diog. Laert. ix. 105. The works *περί ζήρσεως* and *κατὰ σοφίας*, which have been assigned to him, belong to Ænesidemus. Ib. 106.

<sup>26</sup> This reconciles the statement that Timon left no disciples; and as Cicero, de Or. iii. 17; de Fin. ii. 11, 13, says, that the school of Pyrrho had been a long time defunct, although a long catalogue of Sceptics are given. Diog. Laert. ix. 115, 116; Aristocl. l. l.

of reason than virtue;<sup>27</sup> for virtue is one and the same with happiness. How closely this view was interwoven in all the doctrines of the Sceptics is clear from this, that it affords the ground of the division which Pyrrho gives to philosophy. Whoever would live happily ought to look to three things; first, how things are in themselves; secondly, in what relation man stands to them; and, lastly, what will be the inevitable consequences of such relations.<sup>28</sup>

The solution of the first question involves all the scepticism of the school. For the Sceptics sought to show that all things, without exception, are indifferent as to truth and falsehood, uncertain, and in nowise subject to man's judgment. Neither our senses, nor our opinions concerning things, teach us any truth.<sup>29</sup> According to Pyrrho, it is impossible to say more of aught than that is, than that, to every precept and to every position, a contrary may be advanced.<sup>30</sup> That they so taught, there is no question, yet it is difficult to discover the grounds on which the first Sceptics rejected all certainty of knowledge. It does, indeed, appear

<sup>27</sup> Cic. de Offic. i. 2; de Fin. iii. 3, 4; iv. 16. Pyrrho —, qui virtute constituta nihil omnino, quod appetendum sit, relinquat.

<sup>28</sup> Aristot. ap. Eus. Pr. Ev. xiv. 18. ὁ μαθητὴς Πύρρωνος Τίμων φησι δεῖν τὸν μέλλοντα εὐδαιμονήσῃν εἰς τρία ταῦτα βλέπειν· πρῶτον μὲν ὅποια πέφυκε τὰ πράγματα· δεύτερον δέ, τίνα χρὴ τρόπον ἡμᾶς πρὸς αὐτὰ διακείσθαι· τελευταῖον δέ, τί περιέσται τοῖς οὕτως ἔχουσι.

<sup>29</sup> Aristotle (ibid.) proceeds to say, τὰ μὲν οὖν πράγματα φησιν αὐτὸν (sc. τὸν Πύρρωνα) ἀποφαίνειν ἐπίσης ἀδιάφορα καὶ ἀστάθμητα καὶ ἀνίκερτα διὰ τοῦτο μήτε τὰς αἰσθήσεις ἡμῶν μήτε τὰς δόξας ἀληθεύειν ἢ ψεύδεσθαι.

<sup>30</sup> Diog. Laert. ix. 61. οὐ γὰρ μᾶλλον τόδε ἢ τόδε εἶναι ἕκαστον. Ib. 106. καὶ Αἰνειδῆμος ἐν τῷ πρώτῳ τῶν Πυρρωνείων οὐδὲν φησιν ὀρίζειν τὸν Πύρρωνα δογματικῶς διὰ τὴν ἀντιλογίαν.



likely that the disputes of the different philosophical schools, which were so rife in their days, had some influence upon them, and with that controversial skill which they had acquired in the Megarian school, they may, perhaps, have employed the grounds of opposite theories for their mutual refutation. Conformably with their perfectly practical tendency, they seem to have looked principally to ethics; but in this domain of inquiry, they arrived merely at the dogma of the Sophists, that nothing, in itself, is beautiful or ugly, just or unjust, but that all is judged of by man according to convention or habit.<sup>31</sup> In support of this view, they do not appear to have adduced any new proof, but to have been satisfied with the arguments which the Sophists had derived from the great variety of opinions prevailing on moral questions.<sup>32</sup> It is evident, then, that the moral end which their doctrine posited, could not be any universal work of the reason, but that, setting itself free from all universal truth, it would give free scope and room for the particular inclinations of every individual. Their scepticism, however, did not confine itself to the certitude of moral ideas, but, naturally enough, extended itself to science in general, where, unquestionably, it derived rich nourishment from the conflicting doctrines of the existing schools of philosophy. As, however, later authorities seldom adduce

<sup>31</sup> Diog. Laert. ix. 61. οὐδὲν γὰρ ἔφασκεν οὔτε καλὸν οὔτε αἰσχρὸν οὔτε δίκαιον οὔτε ἀδίκον· καὶ ὁμοίως ἐπὶ πάντων μηδὲν εἶναι τῇ ἀληθείᾳ, νόμῳ δὲ καὶ ἔθει πάντα τοὺς ἀνθρώπους πράττειν. Sext. Emp. xi. 140. ὅτι οὔτε ἀγαθὸν τί ἐστι φύσει οὔτε κακόν, ἀλλὰ πρὸς ἀνθρώπων ταῦτα νόμῳ κέκριται, κατὰ τὸν Τίμωνα. Suid. s. v. Πύρρων.

<sup>32</sup> Diog. Laert. ix. 82, 83, 101.

the doctrines of the first Sceptics, we cannot speak with much confidence concerning the procedure of Pyrrho and Timon against the Dogmatists. Timon appears to have written against the Aristotelian doctrine of *motion in time*, in a way similar to that of Zeno of Elea, and the Megarians.<sup>33</sup> Against the Aristotelian method of grounding science by proof, his question appears to have been directed whether any matter may be assumed *in limine* ;<sup>34</sup> for he may have considered that the propositions from which a conclusion is drawn are nothing more than hypothetical assumptions. But the deadliest weapon which the ancient Sceptics wielded against dogmatism, was constructed out of the opposition between sensuous appearance and the true entity which is the object of rational cognition. For the assertion of this contradiction is implied in the confession of Timon, that, although a particular object might appear to him to be sweet, he still would not assert it to be so ;<sup>35</sup> while, however, it is asserted more expressly in his declaration, that he reckons it as one of the phenomena to which he must adhere, that there is an eternal nature, divine and good, from which human life receives its regularity.<sup>36</sup> According to this, then, the Sceptics felt,

<sup>33</sup> Sext. Emp. adv. Math. vi. 66 ; x. 197.

<sup>34</sup> Ib. iii. 2. Τίμων ἐν τοῖς πρὸς τοὺς φυσικοὺς τοῦτο ὑπέλαβε δεῖν ἐν πρώτοις ζητεῖν· φημί δὲ τὸ εἰ ἐξ ὑποθέσεώς τι ληπτέον. Cf. Diog. Laert. ix. 90, 91.

<sup>35</sup> Diog. Laert. ix. 105. τὸ μὲν ὅτι ἔστι γλυκύ, οὐ τίθημι· τὸ δὲ ὅτι φαίνεται, ὁμολογῶ.

<sup>36</sup> Ap. Sext. Emp. adv. Math. xi. 20.

ἡ γὰρ ἐγὼν ἱρέω, ὥς μοι καταφαίνεται εἶναι.  
μῦθον ἀληθείης ὀρθὸν ἔχων κανόνα,  
ὥς ἡ τοῦ θείου τε φύσις καὶ τὰγαθοῦ αἰεὶ',  
ἐξ ὧν ἰσότατος γίνεται ἀνδρὶ βίος.

indeed, the necessity which forces man to pursue a knowledge of a truth beyond phenomena; but they were unable to reach any stable point for the investigation of the supra-sensible. This is strongly confirmed by the connection which we find subsisting between them and the Megarians and Democritus. With the term Sceptics, the supra-sensible signified merely an unknown something; it was, as it were, the sign-post of the limited nature, or rather, of the nothingness of human knowledge. They adhered to this idea from a simply negative and sceptical point of view, in order to combat, the more successfully, doctrines which, in their day, were gaining a rapid and extensive diffusion, which placed the truth of science in sensuous perception, and the experience resulting from it. Their mode of view, consequently, exhibits a necessary phase of science, and is a natural growth of the age in which they lived.

It is a much debated question, and one which admits of no positive solution, whether the ten forms of discourses (*τρόποι*), or common-places (*τόποι*), which are ascribed to the ancient Sceptics, belong to Pyrrho and Timon, or to a latter age and to Ænesidemus.<sup>37</sup> But as we find the ancient Sceptics constantly making use of them, we may assume that, although they may not have arranged them in a systematic table, they, nevertheless, were in the habit of availing themselves of whatever is essential in them. Accordingly, they are

<sup>37</sup> Sext. Emp. Pyrrh. Hyp. i. 36; Diog. Laert. ix. 79; Aristocl. l. 1., where the number nine is probably an error. They are also called *λόγοι*. For from Ænesidemus seems Sext. Emp. adv. Math. vii. 345, *οἱ παρὰ τῷ Λίηνσι-δήμῳ δέκα τρόποι* to speak.

not worked out with great art ; on the contrary, they are quite agreeable to what we should suppose was the character of the scepticism of this age ; being, almost without exception, directed against the adequacy of the sensuous presentation. For instance, the Sceptics, in support of their opinions that it is impossible to know the truth, appeal to the difference of sensation in different animals. Moreover, they proceed to observe, the sensations even of men are not universally identical ; objects are presented differently by the different senses ; the representations of objects vary according as the states of the body and soul are changed ; and, lastly, the relations of different objects to man give different phenomena. Moreover, objects are constantly modified by circumstances, and it is consequently almost impossible to seize them in their true and independent nature. When the sensation of an object is intense we perceive in it very different qualities from those which a weaker sensation enables us to discover ; when an object presents itself rarely, our attention to it is greater and our judgment of it is different from what it would be if it were to occur more frequently. Lastly, nothing appears except in a personal relation either to ourselves or to others, and from the appearance of a thing it is impossible to draw any conclusion as to its absolute nature. All these tropes have a common object, the refutation of the truth of the sensuous presentation ; and there is only one involving a sceptical principle of a different origin. This is drawn from the diversity of human opinions, manners, and customs, which are either directly or indi-

rectly opposed to each other; and although it relates pre-eminently to morals, it is also applied against certain mystical and philosophical doctrines,<sup>38</sup> and under this head the opinions of philosophers concerning the supra-sensible are combated. But the Sceptics appear to have confined themselves to showing that to every doctrine an opposite may be advanced. This conflict of opinions, they argued, proves, that of the supra-sensible nothing can be known by man.

Such being the answer to the first question, the solution of the second follows as a matter of course. For if we know nothing of things, nothing can be more suitable than a suspension of judgment, a withholding of all assertion, (*αφασία, ἐποχή*.)<sup>39</sup> This solution, however, involves many difficulties; for how is it possible to practice the precept which it enjoins? An entire abstinence from affirmation or negation is impracticable; it is impossible to speak only in questions as the Sceptics were wont to do; for even they, according to all appearance, wished that an affirmative answer should be given to the questions which contained the fundamental principles of their philosophy. Nevertheless, they cautiously abstained from giving to them such a form; and in order to avoid everything like a positive assertion, they had recourse to a variety of artifices. It is not quite certain that all of these were in use among the earlier Sceptics, but of some

<sup>38</sup> Sext. Emp. l. i. 145 sqq.

<sup>39</sup> Aristocl. l. i.; Diog. Laert. ix. 61, 107. Aristocles placed the notion of *ἀφασία* in the answer to the third question. Of like kind are the expressions, *ἰσοσθῖνία*, *ἀντίθεσις τῶν λόγων*, *ἀρρεψία*, *ἀοριστία*, *ἀκαταληψία*, κ. τ. λ.

it is beyond doubt ; and when it is considered that the period of the first formation of Scepticism was an age, beyond all others eminently fertile in subtle refinement and artifices of language, we cannot long hesitate to attribute to it at least the greater number and the more precise of these formularies of Scepticism. Such expressions of doubt as, —*it is possible; it may be so; probably; I assert nothing; all is uncertain; more this than that;* (οὐδεν μᾶλλον, οὐ μᾶλλον;) presented themselves naturally without any great labour of invention. But the Sceptics were anxious to refine upon and to modify even these, in order to guard against the appearance of anything like positive assertion. With this view when they said—"I assert nothing," they cautiously subjoined,—“not even that, I do not assert anything.”<sup>40</sup> When they taught—"every argument has a counterpart equally valid," they added, "as far as we can see," or, "our assertion itself has an opposite equally strong."<sup>41</sup> When they used the expression—"not more this than that," they thought it necessary to subjoin "that even this proposition is not more this than that."<sup>42</sup> When they declared that "all is uncertain," they wished that their custom of employing "it is," for "it appears," should be allowed to be legitimate.<sup>43</sup> This artifice and care in the choice

<sup>40</sup> Sext. Emp. Hyp. Pyrrh. i. 197; Diog. Laert. ix. 74; Gell. xi. 5.

<sup>41</sup> Sext. l. i. 202; Diog. Laert. ix. 76. This is the *ἰσοσθινεια τῶν λόγων*. Diog. Laert. ix. 101.

<sup>42</sup> Diog. Laert. ix. 76; Sext. Emp. l. i. 188 sqq.

<sup>43</sup> Sext. Emp. Hyp. Pyrrh. i. 187—208; Diog. Laert. ix. 74—77. The οὐ μᾶλλον, the *διὰ τί ναι καὶ διὰ τί οὐ*, the *ἀφασία*, the *οὐδεν ὀρίζω*, the *ἑποχή* and *ἀκαταληψία*, are expressly ascribed to Pyrrho and Timon. Diog. Laert. ix. 61, 76, 107; Aristocl. l. i.

of expressions sufficiently betrays the unnaturalness of the object with which they set out. But the purpose of the Sceptics is most distinctly revealed by their confession, that in all their assertions they had nothing else in view than to declare the state (*πάθος*) of their own minds, to which they are forced to conform as men and not as philosophers. They were unable to testify to any fact beyond their own internal experience, which indeed, as a phenomenon, they were compelled to posit, since, they said, phenomena enforce themselves irresistibly upon the mind.<sup>44</sup> Thus, to maintain its position, the scepticism of this age was obliged to admit the possibility of affirming the certainty of its own internal states, at the same time that it cautiously abstained from advancing anything concerning the knowledge or ignorance of others; and by this course it approximated very closely to the sophisms of Protagoras and the Cyrenaics. When, however, the Sceptics proceeded to contend against the Dogmatists, they were unable, as was naturally to be expected, to restrict their assertions to themselves, and to the actual condition of their internal states.

We have now only to consider the answer of the Sceptics to their third question;—What is the state of the individual who abstains from all judgment upon things? This matter intimately concerns the moral end of their doctrine. To abstain from all judgment is, they said, to insure happi-

<sup>44</sup> Timon ap. Diog. Laert. ix. 105; ib. 101; Timon ap. Sext. Emp. adv. Math. vii. 30.

ἀλλὰ τὸ φαινόμενον παντὶ σθίνει, οὐπερ ἂν εἴθῃ.  
Sext. Emp. Pyrrh. Hyp. i. 191, 197. ὃ πάσχει διηγούμενος. Ib. 203.

ness. For the abstinence from all positive opinion is followed, as a substance is by a shadow, by a freedom from all mental disturbance.<sup>45</sup> He who has embraced Scepticism lives thenceforward tranquilly, without inquietude, without agitation, with an equable state of mind, without regarding all the perplexities of a sweet-speaking wisdom.<sup>46</sup> The mass of mankind are seduced by their own passions (*πάθος*), opinions, and idle prescription; but the sage decides upon nothing, and in a calm indifference holds nothing to be either good or bad, and feels himself, therefore, free from every impassioned pursuit which is necessarily destructive of happiness.<sup>47</sup> Consequently an entire indifference to all human interests, a total apathy, is the fruit of true Scepticism; whatever relates to external good things is to the sage a matter of indifference.<sup>48</sup> Pyrrho is said to be the originator of the doctrine that there is no difference between health and sickness, life and death; in short, his wish was, as much as possible, to divest himself of humanity.<sup>49</sup>

<sup>45</sup> Diog. Laert.. ix. 107. τέλος δὲ οἱ σκεπτικοὶ φασὶ τὴν ἐποχὴν, ἣ σκιᾶς τρόπον ἐπακολουθεῖ ἡ ἀταραξία, ὥς φασιν οἱ τε περὶ τὸν Τίμωνα καὶ Αἰνησίδημον. Sext. Emp. Pyrrh. Hyp. i. 29. Aristocl. l. l.

<sup>46</sup> Sext. Emp. adv. Math. xi. l. οὕτω γὰρ ἕκαστος ἡμῶν τὴν τέλειαν καὶ σκεπτικὴν ἀπολαβὼν διάθεσιν κατὰ τὸν Τίμωνα βιώσας.

————— ῥῆστα μεθ' ἡσυχίης  
αἰεὶ ἀφροντίστως καὶ ἀκινήτως κατὰ ταῦτά,  
μὴ προσέχων δειλοῖς ἡδυλόγῳ σοφίης.

<sup>47</sup> Timon says of Pyrrho in Aristotle :

ἀλλ' οἶον τὸν ἄτυφον ἐγὼ ἶδον ἢ δ' ἀδάμαστον  
πᾶσιν, ὅσοις δαμνᾶται ἅμ' ἀρρήτοις τε φατοῖς τε  
λαῶν ἔθνεα κοῦφα, βαρυνόμεν' ἔνθα καὶ ἔνθα  
ἐκ παθίων δόξης τε καὶ εἰκαίης νομοθήκης.

Sext. Emp. Hyp. Pyrrh. i. 27; adv. Math. xi. 111 sqq.

<sup>48</sup> Cic. Ac. ii. 42; de Fin. iii. 3, 4.

<sup>49</sup> Cic. de Fin. ii. 13; Stob. Serm. cxxi. 28; Epictet. Fragm. 93. ed.



In morals, consequently, the efforts of the Sceptics were opposed to those mental states, to which in science they unconditionally abandoned themselves. This is a striking inconsistency in their system; and accordingly they were forced in practice to remit a little of their rigour of apathy, since they could not fail to see how impossible it was to be absolutely indifferent to all things, for this is a contradiction to life itself. Therefore, they said, so far as it lies in our power we choose and avoid nothing but that which is not in our power, and what excites a necessary want, that we cannot do without.<sup>50</sup> Consequently in practice they abandoned themselves to the habit of life, to the necessity of choosing, and to a decision concerning good and evil;<sup>51</sup> remarking, however, that the true sceptic does not follow such a course as a philosopher, but merely in accordance with unphilosophical opinion. If he were to act in the full spirit of his philosophy the Sceptic would be inactive, would forego life itself, and it is only from the constraining force of his mental emotions that he does act.<sup>52</sup> Thus did the Sceptics avow that their philosophy is destructive of life, and thereby set it at issue with life. But it was not to be feared that such a relation could long

Schweigh. ; Aristocl. l. l. σκωπτόμενον δ' ὑπὸ τῶν παρόντων εἰπεῖν ὡς χαλεπὸν εἶη τὸν ἀνθρώπον ἐκδύναί.

<sup>50</sup> Diog. Laert. ix. 108. οὔτε γὰρ τάδε ἐλοιμέθα, ἢ ταῦτα φευξοίμεθα, ὅσα περὶ ἡμᾶς ἐστί· τὰ δὲ ὅσα περὶ ἡμᾶς οὐκ ἐστίν, ἀλλὰ κατ' ἀνάγκην, οὐ δυνάμεθα φεύγειν. For *περὶ ἡμᾶς*, in all probability, we ought to read *παρ' ἡμᾶς* with Mer. Casaub. Sext. Emp. Pyrrh. Hyp. i. 30.

<sup>51</sup> Timon ap. Sext. Emp. adv. Math. xi. 164 ; Diog. Laert. ix. 62, 105, 106.

<sup>52</sup> Sext. Emp. adv. Math. xi. 165. κατὰ μὲν τὸν φιλόσοφον λόγον οὐ βιοῦ ὁ σκεπτικὸς ἀνεπίρρητος γὰρ ἐστίν ὅσον ἐπὶ τούτῳ· κατὰ δὲ τὴν ἀφιλόσοφον τήρησιν δύναται τὰ μὲν αἰρεῖσθαι, τὰ δὲ φεύγειν.

be permanent. The Sceptics soon evinced a disposition to effect a just reconciliation of the two. Although man cannot entirely divest himself of humanity, it is at all events advisable to moderate his desires and the influence of his passions upon his conduct in life, and this accordingly they regarded as the true end of philosophy. They expressed this end by the notions of mildness and moderation of the passions (*μετριο πάθεια*.)<sup>53</sup> To this state of mind the philosopher will easily attain if in all adverse circumstances he persuades himself that they by nature are not evil, and that whoever thinks otherwise must suffer doubly, being, on the one hand, unable to elude the painful necessity, and, on the other, thinking it a misfortune.<sup>54</sup> How it was possible to advance such a universal rule of conduct without contradicting the fundamental principle of their philosophy, the Sceptics have left unexplained. Perhaps, however, they thought to get rid of the inconsistency by supposing that both this constancy of mind, and this moderation of the passions, exhibited themselves in the light of phenomena which they had observed, and which they deemed it necessary to notice historically.<sup>55</sup>

On the whole, we are forced to regard the doctrine of Pyrrho as a proof of the general decline of science which now took place. For it would be

<sup>53</sup> Sext. Emp. Pyrrh. Hyp. i. 25. *φαμέν δὲ ἄχρι νῦν τέλος εἶναι τοῦ σκεπτικοῦ τὴν ἐν τοῖς κατὰ δόξαν ἀταραξίαν, καὶ ἐν τοῖς κατηναγκασμένοις μετριοπάθειαν*. Ib. iii. 235; adv. Math. vii. 30, according to Timon. *Diog. Laert.* ix. 108. *ἄλλοι δὲ τὴν πρῶτην τέλην εἰπεῖν φασὶ τοὺς σκεπτικούς*.

<sup>54</sup> Sext. Emp. Pyrrh. Hyp. i. 30.

<sup>55</sup> Ib. 4. *ἀλλὰ κατὰ τὸ νῦν φαινόμενον ἡμῖν ἱστορικῶς ἀπαγγέλλομεν περὶ ἐκάστου*. On this account it stands in the above passage *φαμέν δὲ ἄχρι νῦν*, κ. τ. λ. Ib. 205. *φαινομένη αὐτοῖς ἀταραξία*.

difficult to say in what respect the Sceptics advanced the cause of philosophy, so far, at least, as regards scientific research. Their doubts mainly concern the sensuous presentation ; while their arguments are extremely superficial. How different was the rigorous method with which Plato and Aristotle, before them, had exposed the untenability of all opinions resting exclusively upon the senses ! What, on the other hand, the Sceptics advanced against reason is of little importance ; it merely noticed historical facts, and expresses nothing else than the despair into which the observation of the mass of conflicting opinions and principles had plunged them. Indeed the Sceptics exhibit neither industry nor acuteness in the development even of their own opinions and principles. But perhaps we must adopt the very improbable suspicion that the foundation of their theory has been lost, and that of the system of their ancient masters the later Sceptics preserved all but what was of greatest value ! But, in truth, there is no great acuteness or penetration in those who first of all reject the authority of the senses, and then enjoin that they should be followed as the only object on which the mind can rely ; and yet again recommend that they be kept in subjection and tempered by an unknown something ! The appearance of Scepticism at this period, admits easily of historical explanation. It preserves the contrariety of the sensible and the purely intelligible ; and refuses to yield to the predominant tendency of the age, to reduce all within the domain of sense, but, on the other hand, it was only with great difficulty that it was able to

keep aloof from the prevailing inclination. The violence of the exertion which this endeavour entailed shows itself chiefly in two points; partly in its extravagant contempt for the sensible, which led the sceptics, too sharply, to renounce all the blessings of this life, and partly in the prominence with which they threw out the opposition between phenomena and the truth of reason. They thought it necessary to surround the former with an impassable gulf, in order to keep the latter markedly distinct. In truth there is something almost ridiculous in comparing the passionate zeal of the Sceptics on this subject with their ordinary antipathy against everything like impassioned sentiment or feeling. At best, Scepticism is nothing more than a transition to a new intellectual development, and indicates a state of mental culture in which, with a persuasion that truth is not to be found in sensible phenomena, there exists a conviction that the development which science has already attained to, does not present a mean whereby the inquirer may raise himself above the sensible. Scepticism is a middle term between Plato and Aristotle, on the one hand, and the Stoics and Epicureans on the other, and at the same time, it is at best a merely fugitive and transient phenomenon.

## CHAPTER II.

### EPICURUS, HIS DOCTRINES, AND SCHOOL.

EPICURUS, the son of poor parents, was born Ol. 109. 3.<sup>1</sup> The place of his birth is doubtful, for his father is said to have been one of the settlers who left Athens for Samos, Ol. 107. 4, and accordingly Samos is sometimes given as his birth-place, while the more usual account makes him an Athenian of the borough of Gargettus.<sup>2</sup> At all events it is certain that he was the son of an Athenian citizen, and received his education first at Samos, and lastly at Teos.<sup>3</sup> His father was a teacher of grammar, in which profession he is said to have assisted him; and it is also stated that he was an assistant to his mother, who practised the magical art.<sup>4</sup> His acquaintance with philosophical investigations commenced at a very early age, and he boasted of having been a philosopher from his twelfth or thirteenth year.<sup>5</sup> This boast refers, in all probability, to the story of his having asked a teacher of grammar, who read to him the verse of Hesiod, which makes all to arise out of chaos, what chaos itself arose from? whereupon being referred

<sup>1</sup> Diog. Laert. x. 14.

<sup>2</sup> Ib. 1, 3; cf. Menang. ad h. l.; Strab. xiv. 1, p. 171; cf. Clintonis Fasti Hellenici, ann. 352; Gassendi de Vita et Moribus Epicuri, i. 1.

<sup>3</sup> Strab. l. l.

<sup>4</sup> Diog. Laert. x. 3, 4.

<sup>5</sup> Ib. 2, 14; Suid. s. v. 'Επίκουρος.

to philosophy, he desired to be instructed therein.<sup>6</sup> With this anecdote, the other story is easily reconcilable, that having become acquainted with the writings of Democritus he passed from the study of grammar to that of philosophy.<sup>7</sup> In the latter study many teachers have been assigned to him,<sup>8</sup> whose names it is not essential to mention, both because the elements in his system, which he borrowed from preceding philosophers, are easily traceable to their respective sources, and because, in fact, none of his teachers apparently exercised any great influence in the formation of his opinions. It is in this sense alone, that we may well admit the correctness of his own assertion, that he had had no masters, but had learned philosophy from himself;<sup>9</sup> notwithstanding that it is undoubtable that he drew the main principles of his own system out of the writings and doctrines of the earlier philosophers. The early years of Epicurus appear to have been unsettled and agitated. In his eighteenth year he visited Athens, where, however, he only continued a year; for when, upon the death of Alexander, the Athenians withdrew from Samos, his father retired to Colophon, Epicurus proceeded to the same place. According to one statement he here opened a school;<sup>10</sup> although, according to another, he had reached his two and thirtieth year before he first taught philosophy,

<sup>6</sup> Sext. Emp. adv. Math. x. 18 ; Diog. Laert. x. 2.

<sup>7</sup> Diog. Laert. l. l.

<sup>8</sup> Gassendi, l. l. ; i. 4.

<sup>9</sup> Diog. Laert. x. 13 ; Cic. de Nat. D. i. 26 ; Sext. Emp. adv. Math. i. 3 ; Plut. n. posse suav. v. sec. Epic. 18.

<sup>10</sup> Liog. Laert. x. 2.

which he did successively at Mitylene and Lamp-sacus, in which places he resided for nearly five years.<sup>11</sup> In his thirty-sixth year he came to Athens to open a school of philosophy, over which he presided until his death, which took place Ol. 127. 2.<sup>12</sup> At the first he was content to mix with the other philosophers who taught at Athens, without claiming the merit of teaching an original system of his own, simply calling himself a Democritean;<sup>13</sup> afterwards, when his reputation was established, renouncing all alien opinions, he separated from the other philosophers; and, as the gymnasia were all occupied, opened a school in the villa and garden which he possessed at Athens.<sup>14</sup> Here, in the society of his brothers and friends, he passed a life devoted to philosophy and tranquil pleasure. The friendship of the Epicureans is celebrated; in a time of general scarcity and need they contributed to each others' support; and Epicurus compared his society to the Pythagorean fraternity. It is not, he observes, necessary to establish a community of property, since true friends can confide in one another.<sup>15</sup> In fact, it would seem that Epicurus was naturally formed to take delight in the social intercourse of friendship. As for the com-

<sup>11</sup> Ib. 14, 15; Suid. l. l.

<sup>12</sup> Diog. Laert. x. 2. 15; Cid. de Fato, 9.

<sup>13</sup> Plut. adv. Col. 3. He is said to have received the doctrine of Democritus from Nausiphanes. Cic. de Nat. D. i. 26. But Nausiphanes, whom he refused to acknowledge as his teacher, is also considered a disciple of Pyrrho. Sext. Emp. adv. Math. i. 2; cf. Diog. Laert. i. 15; x. 13, 14; Aristocl. ap. Eus. Pr. Ev. xiv. 20, fn.

<sup>14</sup> Diog. Laert. x. 2, 10; Plin. Hist. Nat. xix. 4.

<sup>15</sup> Plut. v. Demetr. 34; Diog. Laert. x. 11. They are said to have had also mysteries. Diog. Laert. x. 5; Clem. Alex. Strom. v. p. 576.

panions of Epicurus, they, perhaps, may have hoped to find in the endearments of friends united by the tie of common sentiments and opinions, a substitute for those patriotic and political relations which had now lost all their ancient influence. Within such a society they may have risen superior to the selfish principles of their own doctrine, although it must not be forgotten that men of soft and yielding temperament are more likely to agree than those of a firmer and more decided character. That the gardens of Epicurus were not saddened by a very strict and sombre morality is clear from the principles of the school, and the number of courtesans which frequented them, and patronised this new philosophy of life.<sup>16</sup> Although it is improbable that any species of sensual gratification was prohibited in the Garden, there is no doubt that much of what is told by some, of the wanton pleasures of the Epicurean herd, is nothing less than pure calumny, since others have raised their voice in praise of its temperance.<sup>17</sup> The very principles of its philosophy were unfavourable to immoderate indulgence. However, it is impossible to judge by these of the moral character of their author, and still less of his followers; for a moral

<sup>16</sup> Diog. Laert. x. 7; Plut. non posse suav. v. Sec. Epic. 4, 16. Of *Leontion* it is known that she herself composed works on philosophy. Cic. de Nat. D. i. 33. She was originally a courtesan, although, as Gassendi maintains, she was afterwards the wife of Metrodorus, the most eminent friend and disciple of Epicurus. Of the other courtesans who frequented the gardens of Epicurus, it may be supposed that they were only brought to the common meals in accordance with the custom of the day.

<sup>17</sup> The Stoics ascribed to Epicurus certain diseases arising from his immorality and evil vices. Cic. ad Fam. vii. 26. On the other hand, practices of self-restraint are ascribed to Epicurus, Sen. Ep. 18.



theory like that of Epicurus is prepared to allow of many thing as exceptions, or even to justify them on the ground of expediency.

The school of Epicurus has been often praised for the purity and uniformity with which it maintained the doctrine of its founder.<sup>18</sup> This, however, is a poor merit, and only proves the weakness of the scientific impulse which actuated it. Accordingly, among the disciples of Epicurus, no one stands eminent above the rest, except, perhaps, Metrodorus, who, in all probability, was the person who enjoyed the enviable distinction of being more shameless even than his master in his view of sensual enjoyments.<sup>19</sup> Epicurus himself appears to have been little calculated to awaken a true scientific impulse, for he despised all the pursuits of science which did not fall immediately within the domain of his own inquiries. Personally, he was a man of little learning, and indisposed to favour a free development of philosophy, even in accordance with his own view. For the convenience of his disciples, he drew up a short summary of the principles of his philosophy, which he constantly enjoined on them the expediency of committing to memory.<sup>20</sup> His object was to attach the doctrine of the school to himself individually, and from this circumstance, as well as a few other features of his public teaching, he has been charged, seemingly with great justice, with the personal vanity of seeking nothing more by his doctrine than to perpetuate

<sup>18</sup> Numenius ap. Euseb. *Pr. Ev.* xiv. 5 ; cf. Gassendi, ii. 5.

<sup>19</sup> Cic. *de Nat. D.* i. 40.

<sup>20</sup> Cic. *de Fin.* ii. 6, 7 ; Diog. *Laert.* x. 12, 35, 83, 85 ; Sext. *Emp. adv. Math.* i. 1.

his own name.<sup>21</sup> A similar feeling seems to have led him invariably to extenuate the merits of other philosophers, and to depreciate, not merely their doctrines, but to vilify their actions, and, in short, to be often unjust in his judgment of those to whom he was indebted for the greater part of his own system.<sup>22</sup>

Epicurus was a voluminous writer, surpassing, in this respect, even Aristotle;<sup>23</sup> and surpassed by Chrysippus alone. That a man of Aristotle's great literary attainments should leave behind him a great number of works is nothing singular; but in the case of one like Epicurus, whose range of knowledge was very limited, and who even expressed contempt for the deeper researches of science, and whose acquaintance with the earlier systems of philosophy was anything but profound, this voluminous authorship can only be attributed to that self-complacency which is never fatigued with listening to itself. This is apparently confirmed by the frequent repetitions which may be detected even in his scanty remains. To the loss of his greater works Epicurus himself contributed by his practice of composing summaries of his system adapted to the capacity or indolence of his hearers. These summaries have reached us nearly complete, having been preserved by his admirer Diogenes Laertius. They consist of three letters, and the "Leading Principles" (*κύρια*

<sup>21</sup> He himself boasts of the immortality of his name, Senec. Ep. 21; He bequeathed his garden to his school on the express condition that his philosophy should be taught in it and his memory celebrated yearly. Diog. Laert. x. 18; Cic. de Fin. ii. 31.

<sup>22</sup> Diog. Laert. x. 7, 8; Sext. Emp. adv. Math. i. 2—4; Athen. viii. 50, p. 354; Cic. de Nat. D. i. 33; Plut. adv. Colot. 26.

<sup>23</sup> Diog. Laert. i. 16; x. 26.

δόξαι), which the Epicureans were enjoined to commit to memory. There is no ground for questioning their authenticity,<sup>24</sup> while of his larger works we have nothing left but a few fragments.<sup>25</sup> Epicurus affected to despise all rhetorical ornament, and to aim solely at chasteness and simplicity of style. His language, nevertheless, is not wholly exempt from false pomp, and, as to calm and clear transparency of thought and language, he has altogether failed.<sup>26</sup> Even the arrangement of his matter is faulty and confused, and evinces a great want of logical skill and acumen. In short, none but a blind adherent will admire his style of exposition. As to the sources from which a right estimate of his system may be formed, we must, in this respect, confine ourselves almost exclusively to his own works and fragments; for the spirit of his system, especially in its moral portion, has been disfigured as much by the exaggeration of his admirers as by the misrepresentations of his enemies.

The end which Epicurus proposed to himself in science, is distinctly revealed in his definition of philosophy. He declares it to be an activity which, by means of ideas and arguments, procures the happiness of life.<sup>27</sup> Thought is hereby reduced to

<sup>24</sup> They are sometimes abbreviated, sometimes amplified, as may be seen from the citations made from them. Harles, in his work on Fabr. Bibl. Gr. iii. p. 597, and Buhle, Manual of History of Philosophy, i. p. 425, question the genuineness of these writings.

<sup>25</sup> A few but unimportant fragments from his Physics are said to have been found at Herculaneum, which are printed in the second vol. of the Volum. Hercul. and subsequently published by Orelli. Lips. 1818.

<sup>26</sup> Diog. Laert. x. 13, 118; not. Is. Casaub. et Menag. ad Diog. Laert. x. 5, 121.

<sup>27</sup> Sext. Emp. adv. Math. xi. 169. Ἐπικουρος — ἔλεγε τὴν φιλοσοφίαν ἐνέργειαν εἶναι λόγους καὶ διαλογισμοὺς τὸν εὐδαίμονα βίον περιποιῶσαν.

the level of a mean; and this result is perfectly consistent with the fact, vouched by universal testimony, that he despised the more rigorous investigations of science because they contribute nothing to the happiness of life;<sup>28</sup> and that on this ground, he rejected all logical discussions as to the form of science.<sup>29</sup> Utility, therefore, was with Epicurus the sole standard of the value of science; and, on this account, the object of his whole system is to produce a scheme of morals which may inevitably insure a happy life. It is quite true that the Epicureans adopted the usual division of philosophy into Logic, which they called Canonic, Physics, and Ethics;<sup>30</sup> but they confined Logic to the doctrine of the criterion of truth, and connected it with Physics, to which it was as it were introductory;<sup>31</sup> while they only treated of Physics so far as it bore upon Ethics, and by which it must consequently be interpreted and explained. For they taught that the necessity of physics arises out of subsist-

<sup>28</sup> Sext. Emp. adv. Math. i. 1. Other passages are quoted by Gassendi, lib. viii., who, besides, justifies Epicurus on this head but weakly, and by a false explanation of a passage in the letter to Pythocles. Diog. Laert. x. 85. *καὶ τοῖς εἰς ἀσχολίας βαθυτίρας τῶν ἐγκυκλίων τινὸς ἐμπλεκόμενοις.* As to the *ἐγκύκλια*, consult Meibom. et Schneider ad h. l. His contempt of astronomy, as a slavish pursuit, is declared by Epicurus in the above letter. Diog. Laert. x. 93. It is true, he was not a despiser of all scientific enlightenment, but merely so far as they do not subserve to the happiness of life. Sext. Emp. adv. Math. i. 49. Thus too his philosophy was not averse to the fine arts. Plut. n. posse suav. v. sec. Epic. 13.

<sup>29</sup> Cic. de Fin. i. 7; Ac. ii. 30; de Nat. D. i. 25; cf. Diog. Laert. x. 31.

<sup>30</sup> Diog. Laert. x. 29.

<sup>31</sup> Ib. 30. *τὸ μὲν οὖν κανονικὸν ἐφόδους ἐπὶ τὴν πραγματείαν ἔχει καὶ ἴστιν ἐν ἐνὶ τῇ ἐπιγραφόμενῃ κανόν.* Cf. ib. 27. — *εἰώθασι μὲντοι τὸ κανονικὸν ὁμοῦ τῷ φυσικῷ συντάττειν.* On this account some have reckoned only two parts of the Epicurean doctrine. Sext. Emp. adv. Math. vii. 14, 15; Senec. Ep. 89.

ing errors and mythical fancies concerning death, meteors, and the like, which disturb man in his free enjoyment of happiness; and, consequently, render it necessary to teach a more correct physiology.<sup>32</sup> We have here again, it is true, the three parts of philosophy, but at the same time, it is only apparently that they preserve their ancient order; for, although in their lectures the Epicureans observed the usual succession,<sup>33</sup> it is still evident that the character of their Physics was dependent on that of the Ethics; and that the Logic, while it partly prepares the way to their physiology, nevertheless contains assertions which are derived from the latter. Accordingly, as the object of this history is to exhibit the Epicurean system in its essential enchainment and spirit, we must begin with the consideration of their Ethics.

ETHICS. Epicurus, like the other philosophers of his day, placed the supreme good in happiness, or a happy life.<sup>34</sup> His notion of happiness, however, is composed of elements which are drawn, in part, from the doctrine of Democritus, and partly from that of Aristotle. It approximates, however, more nearly to Democritus, and, indeed, even to the Cyrenaics, since he makes pleasure to be the principal constituent of happiness, and even indicated it as the supreme good. His proof of the correctness of this view is derived from the fact, that not only man, but all animals, naturally and instinctively, pursue pleasure and avoid pain.<sup>35</sup> This

<sup>32</sup> Epic. ap. Diog. Laert. x. 80—82, 142, 143.

<sup>33</sup> Sext. Emp. adv. Math. vii. 22.

<sup>34</sup> Epic. ap. Diog. Laert. x. 122, 128; Sext. Emp. adv. Math. xi. 169.

<sup>35</sup> Diog. Laert. x. 129, 137. ἀποδείξει δὲ χρῆται τοῦ τίλος εἶναι τὴν ἡδονήν.

argument is common to Epicurus and the Cyrenaics. Men, he observes, ought deliberately to do that which animals do without deliberation. Every pleasure, accordingly, is in itself a good;<sup>36</sup> it is only in comparison with another that it can be an ill. On this ground, he also teaches that man ought not to pursue pleasure for its own sake, but with a view to the happiness of life which is insured by it. For attention must be directed to the utility of objects, and, on this ground, many pleasures must be despised, since they may occasion grief or vexation, and, at times, even pain be endured for the sake of a surpassing pleasure which results from it.<sup>37</sup> In this precept he attaches himself to Aristotle, for he does not, like the Cyrenaics, direct the moral effort to the pleasures of the moment, but to happiness throughout the whole tenor of existence.<sup>38</sup> But the affinity of the Epicurean and Aristotelian form of doctrine is most clearly shown in this, that Epicurus, like Aristotle, supposes the most intimate dependence between pleasure or happiness, and virtue. It is true that, with him, virtue, of itself, is not a good, but merely the pleasure that ensues from it;<sup>39</sup> still he teaches that virtue is inseparable

νήν τῷ τὰ ζῶα ἅμα τῷ γεννηθῆναι τῇ μὲν εὐαριστεῖσθαι, τῷ δὲ πόνῳ προσκρούειν φυσικῶς καὶ χωρὶς λόγου.

<sup>36</sup> Epic. ap. Diog. Laert. x. 141. οὐδεμία ἡδονὴ καθ' ἑαυτὴν κακόν.

<sup>37</sup> Epic. ib. 129. καὶ ἐπεὶ πρῶτον ἀγαθὸν τοῦτο καὶ σύμφυτον διὰ τοῦτο καὶ οὐ πᾶσαν ἡδονὴν αἰρούμεθα. ἀλλ' ἔστιν ὅτε πολλὰς ἡδονὰς ὑπερβαίνοντες, ὅταν πλεῖον ἡμῖν τὸ δυσχερὲς ἐκ τούτων ἔπηται, καὶ πολλὰς ἀλγηδόνας ἡδονῶν κρείττους νομίζομεν, ἐπειδὴν μείζων ἡμῖν ἡδονὴ παρακολουθῇ. πολὺν χρόνον ὑπομείνουμεν τὰς ἀλγηδόνας. πᾶσα οὖν ἡδονὴ διὰ τὸ φύσιν ἔχειν οἰκίαν ἀγαθόν· οὐ πᾶσα μὲντοι αἰρετή· καθάπερ καὶ ἀλγηδὼν πᾶσα κακόν, οὐ πᾶσα δὲ ἀεὶ φευκτὴ πεφυκυῖα· τῇ μὲντοι συμμετρήσει καὶ συμφερόντων καὶ ἀσυμφόρων βλήψει ταῦτα πάντα κρίνειν καθήκει.

<sup>38</sup> Ib. 148. τοῦ ὅλου βίου μακαριότης.

<sup>39</sup> Epic. ap. Athen. xii. 67. p. 546. τιμητίον τὸ καλὸν καὶ τὰς ἀρετὰς καὶ

from true pleasure, and there is not a pleasant life without virtue, nor virtue without a pleasant life.<sup>40</sup> Thus, then, the notion of the supreme good is exhibited by Epicurus almost in the same form as by Aristotle; and yet, when we examine the intrinsic contents of these forms, we find them essentially different.

This is soon seen when we come to analyse the Epicurean notion of the supreme good. Its only elements are different kinds of pleasure. As to the notion of pleasure, and the value of its several parts, the Epicureans were at issue with the Cyreneans on more than one point. Some of the Cyreneans, as we formerly saw, appreciated corporeal pleasure above mental. Epicurus, on the contrary, who sought not the pleasure of the moment, but an unbroken course of happiness through life, held that the pleasure and pain which the soul derives from itself are higher and more intense than the same states resulting from corporeal causes; for fleshly pleasure and pain are but for the present, whereas the mental states are both for the past and for the future.<sup>41</sup> On this ground, the Epicurean doctrine has been often, but too hastily, praised; for other positions of Epicurus and his followers may be

*τὰ τοιουτότροπα, ἂν ἡδονὴν παρασκευάζῃ. ἂν δὲ μὴ παρασκευάζῃ, χαίρειν ἱστίον.*

<sup>40</sup> Epic. ap. Diog. Laert. x. 132. διὸ καὶ φιλοσοφίας τὸ τιμιώτερον ὑπάρχει ἢ φρόνησις, ἐξ ἧς αἱ λοιπαὶ πᾶσαι πεφύκασιν ἀρεταί, διδάσκουσαι ὥς οὐκ ἔστιν ἡδέως ζῆν ἀνευ τοῦ φρονίμως καὶ καλῶς καὶ δικαίως, οὐδὲ φρονίμως καὶ καλῶς καὶ δικαίως, ἀνευ τοῦ ἡδέως. τὸ I have adopted with Meibom. Probably instead of διδάσκουσαι we ought to read διδασκούσης, as Rossi comm. Laert. p. 310 remarks. Ib. 138, 140; cf. Cic. de Fin. ii. 15.

<sup>41</sup> Diog. Laert. x. 137. τὴν γοῦν σάρκα τὸ παρὸν μόνον χιμαρίζει· τὴν δὲ ψυχὴν καὶ τὸ παρελθὸν καὶ τὸ παρὸν καὶ τὸ μέλλον· οὕτως οὖν καὶ μίζουνας ἡδονὰς εἶναι τῆς ψυχῆς.

brought forward, which would not meet with a very general approbation. Thus he himself declares ; “ I know of nothing which I could look upon as good if I except the pleasures which result from taste, or the gratification of sensual love, or those which are received through the ear, or from the sight of beautiful forms.”<sup>42</sup> And his friend Metrodorus was not ashamed to avow that the wisdom which listens to nature would turn all its care to the belly.<sup>43</sup> And this encomium of sensual pleasure is by no means inconsistent with the eulogy which Epicurus elsewhere bestows on the pleasures of mind, nor with the censure which he, in other passages, passes upon corporeal gratifications.<sup>44</sup> We are convinced of this as soon as we examine what Epicurus and his school understood by the pleasures of the soul. Metrodorus, in his work, which was designed to show that the grounds of happiness lie more in ourselves than in external circumstances, acknowledges that, by the good of the soul, nothing else

<sup>42</sup> Ib. x. 6. οὐ γὰρ ἔγωγε ἔχω, τί νοήσω τὰγαθόν, ἀφαιρῶν μὲν τὰς διὰ χυλῶν ἡδονάς, ἀφαιρῶν δὲ τὰς δι’ ἀφροδισίων καὶ τὰς δι’ ἀκροαμάτων καὶ τὰς διὰ μορφῆς. The passage is taken from the ethical work of Epicurus, *περὶ τέλους*. Similar passages are also found in *Athen.* vii. 8. p. 278 ; 11. p. 280 ; xii. 67. p. 546 ; *Cic. Tusc.* iii. 18 ; *de Fin.* ii. 3 ; *Plut. non posse su-* v. sec. *Epic.* 6 fin.

<sup>43</sup> *Athen.* vii. 11. p. 280. *περὶ γαστέρα γάρ, ὡ φυσιολόγε Τιμόκρατες, περὶ γαστέρα ὁ κατὰ φύσιν βαδίζων λόγος τὴν ἅπασαν ἔχει σπουδὴν.* Ib. xii. 67. p. 546. καὶ Ἐπίκουρος δὲ φησιν· ἀρχὴ καὶ ρίζα παντὸς ἀγαθοῦ ἡ τῆς γαστρὸς ἡδονή.

<sup>44</sup> It is only a few special precepts which are inconsistent with this statement : for instance, that against carnal love ; *Diog. Laert.* x. 118. But, in general, the statements on this head given by *Diog. Laert.* x. 117—121, can only be used with great caution ; as the position, φίλον δὲ οὐδένα κτήσισθαι (τὸν σοφόν) clearly shows ; and in the case of another dogma, *συνουσίη*, κ. τ. λ. the half-Ionic form excites a doubt whether it does not belong to Democritus, who, it is well known, absolutely forbade marriage and concubinage. That Epicurus did not do so, is well established from other sources.



is to be understood than a healthy and tranquil state of the flesh, coupled with the assurance that it is not likely to cease. Epicurus, himself, completes this thought, by asserting that all pleasure of the soul arises from some past pleasure of the flesh.<sup>45</sup> For, as previously observed, intellectual pleasure differs in this from corporeal, that it does not merely enjoy the present, but the past also, and the future. This expression cannot be understood otherwise than as implying that the pleasure of the soul consists in nothing else than in the remembrance of past, and in the anticipation of future bodily pleasure.<sup>46</sup> If he ascribes to the sage any other species of pleasure, it is simply that of knowing himself to be above the blows of fortune, and that thereby he is superior, in moral dignity, to other men. But, even this superiority is founded on nothing more than the remembrance of past, and the hope of future pleasure. With this view, there is no inconsistency in his saying, that it is better to be unhappy but rational, than to be happy and irrational; and that the sage, even in the midst of torments, is happy,<sup>47</sup> since, while his bodily pangs are

<sup>45</sup> Clem. Alex. Strom. ii. p. 417. ὁ δὲ Ἐπίκουρος πᾶσαν χαρὰν τῆς ψυχῆς οἶεται ἐπὶ πρωτοπαθούσῃ τῇ σαρκὶ γενέσθαι· ὃ τε Μητροδωρος ἐν τῷ περὶ τοῦ μείζονα εἶναι τὴν παρ' ἡμᾶς αἰτίαν πρὸς εὐδαιμονίαν τῆς ἐκ τῶν πραγμάτων, ἀγαθόν, φησί, ψυχῆς τί ἄλλο ἢ τὸ σαρκὸς εὐσταθὲς κατὰστημα καὶ τὸ περὶ ταύτης πιστὸν ἔλπισμα;

<sup>46</sup> This opposition of the Epicurean to the Cyrenian doctrine is rightly exhibited by Athen. xii. 63. p. 544. Aristippus is blamed in the following passage; παραπλησίως τοῖς ἀσώτοις οὔτε τὴν μνήμην τῶν γεγονυῖων ἀπολαύσεων πρὸς αὐτὸν ἡγούμενος, οὔτε τὴν ἐλπίδα τῶν ἰσομένων. Diog. Laert. ii. 89. ἀλλὰ μὴν οὐδὲ κατὰ μνήμην τῶν ἀγαθῶν ἢ προσδοκίαν ἡδονὴν φασιν (οἱ Κυρηναῖκοί) ἀποτελεῖσθαι, ὅπερ ἤρκεεν Ἐπικούρῳ. Ib. x. 22, 122. χάρις (χαρὰ;) τῶν γεγονότων, ἀφοβία τῶν μελλόντων.

<sup>47</sup> Diog. Laert. x. 118, 135. Unfortunately, the passage which ought to

most violent, the mind of the sage is strong enough to raise itself beyond the present, and to draw pleasure from remembrance and hope. But the pleasure which Epicurus loves to praise, consists not in the energy of the soul in the pursuit of perfect virtue, but merely in the present enjoyment of corporeal pleasure, combined with the remembrance of past, and the hope of future gratifications of a similar nature.

Epicurus, moreover, differed from the Cyrenaics in their admiration of calm emotions. He did not, it is true, absolutely reject the pleasure in movement, but he considered pleasure in repose to be greater; the former is that of flesh, the latter that of mind, in the undisturbed equanimity of the sage.<sup>48</sup> It is not improbable that, in this view, he was in some degree influenced by the Platonic and Aristotelian doctrine, that the final cause cannot lie in motion and becoming; nevertheless, the principal motive for its adoption, undoubtedly, lay in the character of Epicurus himself. Looking to the life of man, he found it impossible to limit himself to momentary pleasure alone; he felt it necessary to

contain the reason of this, is corrupt and unintelligible. It is, however, clear, from Diog. Laert. x. 22, that the recollection of the past is a joy to the sage even in the midst of the greatest pains.

<sup>48</sup> Diog. Laert. x. 136. διαφέρεται δὲ πρὸς τοὺς Κυρηναίκοις περὶ τῆς ἡδονῆς· οἱ μὲν γὰρ τὴν καταστηματικὴν οὐκ ἐγκρίνουσι, μονὴν δὲ τὴν ἐν κινήσει· ὁ δὲ ἀμφοτέρων, ψυχῆς καὶ σώματος. — ὁ δὲ Ἐπίκουρος ἐν τῷ περὶ ἀρέσεων οὕτω λέγει· ἡ μὲν γὰρ ἀταραξία καὶ ἀπονία καταστηματικαὶ εἰσιν ἡδοναί· ἡ δὲ χαρὰ καὶ εὐφροσύνη κατὰ κίνησιν ἐνεργεῖα (ἐνέργεια) βλίσπονται. Epicurus also admitted of an enduring corporeal pleasure; such a view is, apparently, alluded to by ἀπονία and the *σαρκὸς εὐσταθὲς κατάστημα*. On such a point, it was impossible for the Epicurean theory to observe a strict distinction, since, in it, corporeal and mental are constantly passing into each other.

take into the account both the past and the future, and thereby to fix, as it were, the flux of life. Accordingly, with Epicurus, the past is not clean gone for ever, but it still survives in remembrance, and the future itself is not absolutely not present, but even in the present man must provide for it without fear.<sup>49</sup> On this account, he grants that a man ought, at times, to avoid a pleasure, when a pain greater in degree will ensue from it, and even to submit to pain when it may lead to pleasure.<sup>50</sup> On the same ground, he praises virtue as a necessary mean to happiness, since, without virtue, the right discrimination of beneficial and pernicious pleasures would be impossible. For, with Epicurus, as with the Socraticists, virtue is based on intelligence (*φρόνησις, διάνοια*);<sup>51</sup> although by intelligence he could not have understood anything beyond the prudent calculation of what is likely to prove profitable or hurtful.<sup>52</sup> On this point there can be no doubt, after a full examination of the Epicurean notion of happiness.

When he made happiness to be the end of all human pursuits, he must have supposed it to be attainable. He, consequently, endeavours sedulously to show that happiness is within the reach of man; that over the sage, at least, the power of chance is very little, even though fortune may be the source of the greater evils and blessings of

<sup>49</sup> Epic. ap. Diog. Laert. x. 127.

<sup>50</sup> Ib. 129.

<sup>51</sup> Ib. 132. δὲ καὶ φιλοσοφίας τὸ τιμιώτερον ὑπάρχει ἢ φρόνησις, ἐξ ἧς αἱ λοιπαὶ πᾶσαι πεφύκασιν ἀρεταί. Ib. 144, 145.

<sup>52</sup> Ib. 130. τῇ μὲντοι συμμετρήσει καὶ συμφερόντων καὶ ἀσυμφόρων βλέψει ταῦτα πάντα κρίνειν καθήκει.

life.<sup>53</sup> In consequence of such a view, he necessarily set many limits to the enjoyments of pleasure. Accordingly, the temperance which he enjoins,<sup>54</sup> has been often a subject of encomium, and, in this respect, it has been remarked, that his particular precepts are severe and holy, however pernicious his general doctrine.<sup>55</sup> In fact, he is far from considering refined and exquisite enjoyments to be indispensable for the happiness of life; on the contrary, he boasts, that with a little barley-bread, and water, he would rival Jupiter in happiness; nay, he even expresses an aversion for all costly pleasures, not, however, in themselves, but because of the evil consequences which they entail.<sup>56</sup> This remark rests, ultimately, on a classification of the appetites, analogous to that which we have already met with in Plato and Aristotle. The appetites are either natural and necessary, or natural and not necessary, or even neither natural nor necessary. The first arise out of wants, such as hunger and thirst, which, if not gratified, cause a pain; the second have for their object a pleasure, the absence of which is not painful, as for instance, that of costly and luxurious food. The gratification of the second class does not enhance, it only varies pleasure. Lastly, the pleasures which are neither ne-

<sup>53</sup> Ib. 134. οἶεται μὲν γὰρ ἀγαθὸν ἢ κακὸν ἐκ ταύτης (sc. τῆς τύχης) πρὸς τὸ μακαρίως ζῆν ἀνθρώπους μὴ δίδοσθαι, ἀρχὰς μὲντοι μεγάλων ἀγαθῶν ἢ κακῶν ὑπὸ ταύτης χορηγεῖσθαι. Ib. 144.

<sup>54</sup> Ib. 132. νήφων λογισμός.

<sup>55</sup> Cic. Tusc. iii. 20; Senec. de Vita Beat. 13; Ep. 33.

<sup>56</sup> Stob. Serm. xvii. 30. ἔλεγε δ' ἐτοιμῶς ἔχειν καὶ τῷ Διὶ ὑπὲρ εὐδαιμονίας διαγωνίζεσθαι, μάζαν ἔχων καὶ ὕδωρ. Ib. 34. βρυάζω τῷ κατὰ τὸ σωματίον ἡδεῖ, ὕδατι καὶ ἄρτῳ χρώμενος. καὶ προσπτύω ταῖς ἐκ πολυτελείας ἡδοναῖς, οὐ δι' αὐτάς, ἀλλὰ διὰ τὰ ἐξακολουθοῦντα αὐταῖς δυσχερῆ.

cessary nor natural, arise out of idle fancy and false opinion; such as the desire of being publicly honoured by crowns and statues.<sup>57</sup> The third kind, the sage must naturally reject, and only conditionally admit the second; for when they are pursued with great eagerness, they change themselves into pleasures of misconception.<sup>58</sup> The desire of gratifying them may be easily got rid of; the sage will only indulge them when there is an opportunity to gratify them, but not be miserable when such enjoyments are denied him. Consequently, it is only the disappointment of his natural and indispensable appetites, that can disturb the happiness of the sage; but their gratification is easy,<sup>59</sup> and no one need fear that the supply of his necessary wants will be impossible.

Still it must not be supposed that by this limitation of the desires to what is absolutely necessary, the life of the Epicurean becomes plain and austere. The sage will not live like a Cynic.<sup>60</sup> And although the sage ought to be able to dispense with all enhancements (ποικίλματα), of pleasure, still he is not therefore required to reject them on all occasions. Contentedness with a little, Epicurus regards as a great good; and he places wealth, not in great

<sup>57</sup> Epic. ap. Diog. Laert. x. 127, 144, 149. τῶν ἐπιθυμιῶν αἱ μὲν εἰσι φυσικαὶ καὶ ἀναγκαῖαι, αἱ δὲ φυσικαὶ καὶ οὐκ ἀναγκαῖαι, αἱ δὲ οὔτε φυσικαὶ οὔτε ἀναγκαῖαι, ἀλλὰ πρὸς κενὴν δόξαν γινόμεναι. φυσικὰς καὶ ἀναγκαῖας ἡγεῖται ὁ Ἐπικούρου τὰς ἀληθδόνας ἀπολυσσας, ὡς ποτῶν ἐπὶ δίψους· φυσικὰς δὲ καὶ οὐκ ἀναγκαῖας τὰς ποικιλλούσας μόνον τὴν ἡδονήν, μὴ ὑπεξαίρουμένας δὲ τὸ ἄλγημα, ὡς πολυτελεῖ σιτία· οὔτε δὲ φυσικὰς οὔτε ἀναγκαῖας, ὡς στεφάνους καὶ ἀνδριάντων ἀναθέσεις.

<sup>58</sup> L. l.

<sup>59</sup> Ep. ap. Diog. Laert. x. 130, 144. ὁ τῆς φύσεως πλοῦτος καὶ ὤριστα καὶ εὐπόριστός ἐστιν· ὁ δὲ τῶν κενῶν δοξῶν εἰς ἀπειρον ἐκπίπτει.

<sup>60</sup> Ib. 119.

possessions, but in little wants ; still he does not, therefore, limit the sage to the fewest enjoyments possible, but he merely wishes that he should be able to live upon little, in order that he may be in a state to enjoy, with greater keenness and certainty, the most refined and exquisite of pleasures.<sup>61</sup> It is, he said, a rational object to procure the means of living with decency, comfort, and enjoyment ; the sage will endeavour to acquire riches ; he will seek every opportunity to gain power and supremacy ; it is not even unbecoming in him to pay court to the great.<sup>62</sup> And it is on a similar ground that Epicurus recommends friendship, not only as tending to insure the gratification of necessary wants,<sup>63</sup> but also to embellish life and enhance its enjoyment. In short, however indifferent he may appear to be as to the variety and number of pleasures, his sage does not despise them so very thoroughly as might be thought, or else he would lead a more austere and more simple mode of life.

But in spite of the independence which Epicurus would lend to his sage, he must still find it difficult or impossible to stand secure against all the acci-

<sup>61</sup> Stob. Serm. xvii. 24, 37 ; Epic. ap. Diog. Laert. x. 130. *καὶ τὴν αὐταρκειαν δὲ ἀγαθὸν μέγα νομίζομεν, οὐχ ἵνα πάντως τοῖς ὀλίγοις χρώμεθα, ἀλλ' ὅπως ἂν μὴ ἔχωμεν τὰ πολλὰ, τοῖς ὀλίγοις χρώμεθα, πεπεισμένοι γνησίως, ὅτι ἥδιστα πολυτελείας ἀπολαύουσι οἱ ἥκιστα ταύτης δεόμενοι.* Ib. 142.

<sup>62</sup> Diog. Laert. x. 121, 141. On the other hand, ib. 119. On such special points of detail, the Epicureans do not appear to have always agreed.

<sup>63</sup> Ib. 148. Cf. Cic. de Fin. i. 20. Naturally, we might expect to find the motives of friendship represented as selfish by Epicurus ; nevertheless, as was previously remarked, a better principle seems to have actuated his encomiums upon friendship. Still, we cannot believe that the doctrine, 'the sage,' under certain circumstances, 'ought even to die for a friend,' can have been the issue of a truly Epicurean mind. Diog. Laert. x. 121.

dents of fortune. He is unable to exclude the contingency of bodily pain; and accordingly, his object is to estimate its amount as low as possible. The relation of pleasure to the soul is very different from that of pain; the former is natural, and agreeable to its nature, the latter is contrary to it, and unnatural.<sup>64</sup> Accordingly, he treats of pain and misery as merely transient and momentary states; while pleasure, on the contrary, is permanent and may be retained throughout the whole course of life. Moreover, he says, pain is seldom absolute in the soul, and rarely intense enough to overpower all pleasure; even in long and lingering diseases the pain seldom transcends the pleasure.<sup>65</sup> Pleasure, on the contrary, is of such a nature, that its presence necessarily excludes its contrary. While the domain of misery is thus narrowed by Epicurus, the province of pleasure is as widely extended. This he accomplishes by drawing within its sphere whatever does not manifestly contain a pain. Of course this involves a point of his controversy with the Cyrenaics. For they had assumed what Epicurus denied, that the perfect rest and impassive state is merely a mean between pleasure and pain; on the contrary, the repose of the soul is with him the proper and truest pleasure,—the constant pleasure. This is the pleasure which the sage seeks, that freedom from all disturbance and mental agi-

<sup>64</sup> Ib. 34, 129, 141.

<sup>65</sup> Ib. 139. ὅπου δ' ἂν τὸ ἡδόμενον ἴνῃ, καθ' ὃν ἂν χρόνον ᾖ, οὐκ ἔστι τὸ ἀλγοῦν ἢ τὸ λυπούμενον ἢ τὸ συναμφοτέρων. Ib. 140. τὸ δὲ μόνον ὑπερτεῖνον (sc. ἀλγοῦν) τὸ ἡδόμενον κατὰ σάρκα οὐ πολλὰς ἡμέρας συμβαίνει. If strictly interpreted, indeed, these positions are contradictory of each other. Ib. 148.

tation which, before Epicurus, had obtained the praises of Democritus and Pyrrho.<sup>66</sup> On this subject, however, Epicurus has incurred the censure that he does not recognise any positive end of life, and that the object of the efforts of his sage is a mere passionless state;<sup>67</sup> and, in truth, it is, in some measure, justified by his assertions, that the object of all man's actions is merely not to suffer nor to apprehend pain, and that not to live is far from being an evil;<sup>68</sup> nevertheless, when we look to the direct spirit of his theory, we must acquit him from such a charge. His real opinion is merely, that wisdom and prudence cannot, at most, do more than avoid hurtful things, and teach man contentment in every condition of life; but that when, by these means, the passionless repose of the soul is secured, then nature herself causes pleasure to arise spontaneously from the tempered enjoyment of the present, the fearless anticipation of the future, and even from the calm feeling of health.<sup>69</sup>

By thus reducing the activity of the sage to the avoidance of what is unpleasant, the Ethics of Epicurus has taken a cautious and timid character, as is invariably the case with those moral systems which only concern themselves with sensual pleasures, for these are so easily disturbed by external

<sup>66</sup> Diog. Laert. ii. 87; Epic. ib. x. 131, 136; Cic. de Fin. ii. 10.

<sup>67</sup> Cic. de Fin. ii. 4, 5.

<sup>68</sup> Epic. ap. Diog. Laert. x. 126. ὁ σοφὸς οὐκ οὔτε φοβεῖται τὸ μὴ ζῆν, οὔτε γὰρ αὐτῷ προσίσταται τὸ ζῆν, οὔτε δοξάζεται κακὸν εἶναι τὸ μὴ ζῆν. Ib. 128. τούτου γὰρ χάριν ἅπαντα πράττομεν, ὅπως μῆτε ἀλγοῦμεν, μῆτε ταρασσώμεν. Ib. 139. ὅρος τοῦ μεγέθους τῶν ἡδονῶν ἢ παντὸς τοῦ ἀλγοῦντος ὑπεξαίρεσις.

<sup>69</sup> Thus, next to the ἀταραξία stands the ἀπονία, and next to the ἀταραξία τῆς ψυχῆς, the ὑγίεια τοῦ σώματος. Diog. Laert. x. 128, 131, 136. γ



events. While Aristippus' view of life maintained the semblance, at least, of boldness, by his confident assertion that pleasure is to be drawn from every state and circumstance of things,—the Epicurean theory, on the other hand, betrays throughout a dread of the manifold evils of life, and in the view that, to be truly happy, man has only to conquer his own fears. Now man has to fear partly his fellow-men, partly natural events. But against the fear of his fellows the sage is armed by justice and the laws. Laws are instituted for the sake of the sage, not in order that he may do, but that he may not suffer injustice.<sup>70</sup> The foundation of all law is a compact for mutual advantages; where such a compact does not exist, there is neither law nor justice. There is, it is true, a natural or universal justice; but this consists merely in the utility of those who have entered into the compact, and it is variously modified according to the different ways in which the general good may exhibit itself.<sup>71</sup> When, however, a law is once established, the sage will live quietly and in obedience to it. He might, undoubtedly, act in absolute contravention of absolute justice, since injustice in itself is not an evil; but he is hindered from such a course by the dread of punishment, since he can never be sure that his injustice will escape detection.<sup>72</sup> Thus, then, the sage, not fearing the law, but protected

<sup>70</sup> Epic. ap. Stob. Serm. xliii. 139. οἱ νόμοι χάριν τῶν σοφῶν κεῖνται, οὐχ ἵνα μὴ ἀδικῶσιν, ἀλλ' ἵνα μὴ ἀδικῶνται.

<sup>71</sup> Epic. ap. Diog. Laert. x. 150—153.

<sup>72</sup> Epic. ap. Diog. Laert. x. 151. ἡ ἀδικία οὐ καθ' ἑαυτὴν κακόν, ἀλλ' ἐν τῷ κατὰ τὴν ὑποψίαν φόβῳ, εἰ μὴ λήσει ὑπὲρ τῶν τοιούτων ἐφεστηκότας κολαστάς, κ. τ. λ.

by it, lives in a certain measure secure from the injuries of his fellow-men. From the fear of nature, and in general from all superstitious fears, his own reason, which enlightens him as to the grounds of nature, and despises all fear of the gods and destiny, will emancipate him. Reason teaches man that all depends upon fortune and himself, but that the goods of fortune matter little to the sage who has within himself the prime source of his happiness.<sup>73</sup> Lastly, even if his confidence in fortune must at times waver, he knows at least that death is the end of all misery; and while most dread the thought of death more than all else, to the sage it is as the deliverer from all misery; not indeed an object of desire, for life is a good, but still not an object of dread. For while we live, death is not, and when death is, we are not; when it is present, we feel it not, for it is the end of all feeling, and that, which by its presence cannot affect our happiness, ought not, when thought of as future, to trouble us.<sup>74</sup>

Thus does Epicurus console the sage, not by promising him a great gain, but a final and irremediable loss. And, in fact, in the same way as he seeks to free man from all desire of immortality,<sup>75</sup> he seeks to turn him from all longing after the good in general. Against all those erroneous

<sup>73</sup> Ib. 133, 134, 142—145.

<sup>74</sup> Ib. 124. συνέθιξε δὲ ἐν τῷ νομίζειν μηδὲν πρὸς ἡμᾶς εἶναι τὸν θάνατον. ἐπεὶ πᾶν ἀγαθὸν καὶ κακὸν ἐν αἰσθήσει· στήρησις δὲ ἴστιν αἰσθήσεως ὁ θάνατος. — 125. ὃ γὰρ παρὸν οὐκ ἐνοχλεῖ προσδοκώμενον κενῶς λυπεῖ. τὸ φρικωδέστατον οὖν τῶν κακῶν ὁ θάνατος οὐδὲν πρὸς ἡμᾶς, ἐπιωδήπερ ὅταν μὲν ἡμεῖς ὦμεν, ὁ θάνατος οὐ πάρεστιν, ὅταν δὲ ὁ θάνατος παρῇ τότε ἡμεῖς οὐκ ἴσμεν. The argument is not new. See Axioch. p. 369.

<sup>75</sup> L. l. γνώσις ὁρθή — τὸν τῆς ἀθανασίας ἀφελομένην πόθον.

interpretations of the Epicurean doctrine, of which its author himself complains, which make it to recommend the inordinate pleasures of the glutton,<sup>76</sup> or of those who are absorbed in the reckless enjoyment of the present, it is only just to exculpate him; nevertheless, we must in equal justice condemn him, as not enjoining upon man any higher object of pursuit than sensual pleasure; for what Epicurus terms the pleasure of the soul, is nothing more than a mental repetition, or anticipation, of sensual enjoyments. This is the ultimate sum of his whole doctrine; that the sage will make a prudent use of the present, enjoying himself in the recollection of past, or the hope of future pleasures; and, in his all-sufficiency for himself, feeling himself exalted far above the common destiny of weak and foolish men. By such a rule of conduct, Epicurus thinks to gain for man a life like to God's; for the man who lives in the possession of imperishable good, in nowise resembles a mortal being.<sup>77</sup> How inconsistent with such a delusion were the particular precepts of Epicurus, is palpably shown by the timid and cautious spirit of his whole theory, which forbids him to allow of a total indulgence of pleasure without fear of consequences, and leads him to adopt opinions which but poorly disguise the truth, that man is more or less under the control of fortune. In short, in what light does the sage of Epicurus appear? Is he not the mere creature of

<sup>76</sup> Ib. 131. For τὰς τῶν ἐν ἀπολαύσει κειμένων we ought perhaps to read τὰς ἐν ἀπολαύσει κειμ. or τὰς τῶν ἐν ἀπ. κειμένων. See Rossi Comm. Laert. p. 308.

<sup>77</sup> Ib. 135.

chance and his bodily sensations? Epicurus must at least admit, that with certain temperaments and certain national characters, his sage is a pure impossibility.<sup>78</sup> Indeed we cannot but think that there is some truth in the remark, that, however the Epicurean theory may seem to savour of joy, its precepts, in truth, excite nothing but melancholy.<sup>79</sup>

THE CANONIC. We formerly observed that the Canonic of Epicurus is closely dependent upon his Physics, and that it was intended to embrace the true principles of physiology; but that the point of view with which he set out in his physical treatises was purely ethical, they being designed to free the sage from all superstitious fears. Accordingly, both these portions of his philosophy must adapt themselves to the spirit of his ethical theory; particular points therein must be explained by the exigencies of the latter, and their general character is a result of the peculiar sentiment which gave rise to the Ethics. It is true, the Canonic occasionally appears to have a design of giving a grounding to the Ethics, for it teaches that the sensuous perceptions (*πάθη*) of pleasure, and its contrary, are the criterion of good and evil,<sup>80</sup> but the position that pleasure is good, and its contrary evil, was, without the aid of the Canonic, to the minds of the Epicureans, a certain truth, as an immediate intimation of the mere animal feeling; and it was, consequently, merely

<sup>78</sup> Diog. Laert. x. 117. οὐδὲ μὴν ἐκ πάσης σώματος ἔξωτος σοφον γινώσθαι ἄν, οὐδ' ἐν παντί ἔθναι.

<sup>79</sup> Senec. de Vit. Beat. 13.

<sup>80</sup> Diog. Laert. x. 31, 34.

for the sake of completeness of doctrine that they enumerated the sensuous impressions among the characteristics of truth. What, however, are the true principles of a right system of physics, appeared to them a more difficult and complicated question.

In the solution of this question, they must, conformably with the character of their ethical theory, take the sensible as their basis. Consequently, the sensuous impression is the criterion of all truth and falsehood. Every sensation, according to Epicurus, is true, for it is a motion produced in the mind by somewhat else, to which nothing can be added, and from which nothing can be taken away. Nothing can contradict a particular sensation; a similar one cannot, because the forces of both are equal; nor yet a dissimilar one, since two dissimilar sensations judge of different objects; nor lastly the notion, for all notions are originally dependent upon sensations.<sup>81</sup> On this account, Epicurus looks upon the sensations of the lunatic and the dreamer as true, for, he argues, they move the mind, and the non-being cannot move aught.<sup>82</sup> From this we see how low was the sense in which he employed the term truth of sensations. All that we learn from sensation is, that a sensible object has moved the mind, and as it is impossible to deny that, when pleasure is felt,

<sup>81</sup> Ib. 31. *πᾶσα γάρ, φησὶν αἰσθησις ἀλογός ἐστι καὶ μνήμης οὐδεμίας δεκτική· οὔτε γὰρ ὑφ' αὐτῆς κινεῖται, οὔτε ὑφ' ἑτέρου κινήσεια δύναται τι προσθεῖναι ἢ ἀφελεῖν. οὐδ' ἐστὶ τὸ δυνάμενον αὐτὰς διελέγξαι· οὔτε γὰρ ἡ ὁμοιογενὴς αἰσθησις τὴν ὁμοιογενῆ διὰ τὴν ἰσοσθένειαν· οὐθ' ἡ ἀνομοιογενὴς τὴν ἀνομοιογενῆ· οὐ γὰρ τῶν αὐτῶν εἰσὶ κριτικά· οὐθ' ἡ ἑτέρα τὴν ἑτέραν· πάσαις γὰρ προσέχομεν· οὔτε μὲν ὁ λόγος· πᾶς γὰρ ὁ λόγος ἀπὸ τῶν αἰσθήσεων ἡρτῆται. Ib. 146; Sext. Emp. adv. Math. viii. 9.*

some pleasant exciting cause must be at hand, so it is undeniable that, when we see aught, some visible object must excite the sense of vision.<sup>83</sup> But what the sensible is, is not learned in sensation; the opinion which we may form as to what that is which excites the sensation, must be distinguished from the sensation itself. When Orestes believed he saw the furies, his sensation was true, his error lay in supposing that what gave rise to those images was solid and corporeal. In all cases, accordingly, we must distinguish between the sensations themselves, and the opinions which attach themselves to them, if we would admit that all sensations are true.<sup>84</sup> By sensations Epicurus, following Aristotle, admits that we are cognisant of certain accidents of things, and not of things themselves.<sup>85</sup> Nevertheless, he insists, that the sensations possess a certain resemblance to their objects without the mind, although he is totally unable to point out in what this resemblance consists,<sup>86</sup> and nowhere attempts

<sup>83</sup> Diog. Laert. x. 32.

<sup>84</sup> Sext. Emp. adv. Math. vii. 203 sqq.

<sup>85</sup> Ib. viii. 63; Epic. ap. Diog. Laert. x. 147. *εἰ τινα ἐκβάλλης ἀπλῶς αἰσθῆσιν καὶ μὴ διαιρήσεις τὸ δοξαζόμενον καὶ το προσμένον καὶ τὸ παρὸν ἤδη κατὰ τὴν αἰσθῆσιν καὶ τὰ πάθη καὶ πᾶσαν φανταστικὴν ἐπιβολὴν τῆς διανοίας, συνταράξεις καὶ τὰς λοιπὰς αἰσθήσεις τῇ ματαιᾷ δόξῃ, ὥστε τὸ κριτήριον ἅπαν ἐκβαλεῖς.* Cf. Schneider Epicuri Physica et Meteorol. p. 51.

<sup>86</sup> Ap. Diog. Laert. x. 40, 50. *καὶ ἦν ἂν λάβωμεν φαντασίαν ἐπιβλητικῶς τῇ διανοίᾳ ἢ τοῖς αἰσθητηρίοις εἴτε μορφῆς εἴτε συμβεβηκότων, μορφῇ ἴστιν αὐτῇ τοῦ στερεομνίου.* Ib. 64. *σύμπτωμα αἰσθητικόν.* Ib. 68. *ἀλλὰ μὴν καὶ τὰ σχήματα καὶ τὰ χρώματα καὶ τὰ μεγέθη καὶ τὰ βάρη καὶ ὅσα ἄλλα κατηγορεῖται τοῦ σώματος, ὥσανεὶ συμβεβηκότα ἢ πᾶσιν ἢ τοῖς ὁρατοῖς καὶ κατὰ τὴν αἰσθῆσιν αὐτὴν γνωστοῖς, οὐθ' ὥς καθ' ἑαυτὰς εἰσιν φύσεις δοξαστίον, κ. τ. λ.* Ib. 71. *συμπτώματα πάντα τὰ σώματα νομιστίον.* Cf. Plut. adv. Col. 6, 7. To this conclusion the Epicurean explanation of time also leads: Time is *σύμπτωμα συμπτωμάτων.* Diog. Laert. x. 72, 73; Sext. Emp. Pyrrh. Hyp. iii. 137.

<sup>86</sup> Diog. Laert. x. 46. 49.

to determine in what respect the sensations of the sane differ from those of the insane; for he is forced to confess that it is impossible to show what sensations exhibit to the mind corporeal things; and what arise from mere idle imagination without indicating any corporeal object soever.<sup>87</sup>

Besides sensation, the conception (*πρόληψις*) is also a criterion of truth.<sup>88</sup> By this term Epicurus understands the recollection of many previous phenomena which the sensuous impression from without produces in the soul,—a general conception, which results from several sensuous perceptions.<sup>89</sup> On this account, he declares the mere sensation to be notionless or irrational (*ἄλογος*), and without recollection.<sup>90</sup> Thus, then, even in cognition, memory takes its place by the side of sensation, in the same manner as in morals the present enjoyment is combined with the recollection of past pleasure. To such a conception, founded upon memory, all rational investigation ultimately remounts, for without some preconception it is impossible either to doubt or to inquire;<sup>91</sup> the unknown, how-

<sup>87</sup> Sect. Emp. adv. Math. viii. 63.

<sup>88</sup> Diog. Laert. x. 31. *κριτήρια τῆς ἀληθείας εἶναι τὰς αἰσθήσεις καὶ τὰς πρόληψεις καὶ τὰ πάθη*. Diogenes adds the remark, that the Epicureans also made *φανταστικὰς ἐπιβολὰς τῆς διανοίας* to be a criterion; but these are nothing else than the *πρόληψις*, or the immediate, or the gentler movement of the soul by external impression, such as produced in sleep, or by the imagination. Cic. ad Fam. xv. 16; Lucret. iv. 758, sqq.; Epic. ap. Diog. Laert. x. 38, 50, 51, 147.

<sup>89</sup> Ib. 33. *τῇν δὲ πρόληψιν λέγουσιν οἰονεῖ κατάληψιν ἢ δόξαν ὁρθὴν ἢ ἔννοιαν ἢ καθολικὴν νόησιν ἐναποκειμένην, τοῦτ' ἐστὶ μνήμην τοῦ πολλὰς ἐξωθεν φανίντος*. Cicero's explanation of the *πρόληψις*, de Nat. D. i. 16, 17, is wrong, as in general he is very inaccurate in his interpretation of Epicurean doctrines.

<sup>90</sup> Ib. 31.

<sup>91</sup> Sext. Emp. adv. Math. i. 57; xi. 21. *κατὰ γὰρ τὸν σοφὸν Ἐπίκουρον*.

ever, must be determined either by the investigation of phenomena, or else by pre-existing conceptions.<sup>92</sup> In this manner would Epicurus resolve all general thoughts into sensations, or the remembrance of them; all general notions, he says, are formed by the observed coincidence with objects, by analogy, resemblance, and combination, not however absolutely without the co-operation of reflection.<sup>93</sup> But by reflection, as Epicurus admitted not of any free action of the intellect, he could not have understood anything more than the hunting out of previous sensations.<sup>94</sup> In all investigations the principal point to be observed, is the natural import of the word, i. e. the first representation to which the particular term was applied.<sup>95</sup> In the same manner as Aristotle regarded notions as the indemonstrable principia of reasoning, so did Epicurus make words in their primary significations to be the elements of all investigation.

All conceptions (*προλήψεις*), however, are, like sensations, true;<sup>96</sup> for they are nothing more than the reiteration of sensations within the mind. In

οὔτε ζητεῖν ἔστιν οὔτε ἀπορεῖν ἀνευ προλήψεως. Diog. Laert. x. 33. καὶ οὐκ ἂν ἐζητήσαμεν τὸ ζητούμενον, εἰ μὴ πρότερον ἐγνώκειμεν αὐτό.

<sup>92</sup> Diog. Laert. x. 32. καὶ περὶ τῶν ἀδήλων ἀπὸ τῶν φαινομένων χρὴ σημειοῦσθαι, Ib. 38, 104.

<sup>93</sup> Ib. 32. καὶ γὰρ καὶ ἐπίνοιαὶ πᾶσαι ἀπὸ τῶν αἰσθήσεων γηγόνασι κατὰ τε περίπτωσιν καὶ ἀναλογίαν καὶ ὁμοιότητα καὶ σύνθεσιν, συμβαλλομένον τι καὶ τοῦ λογισμοῦ.

<sup>94</sup> Ib. 33. ἅμα γὰρ τῷ ῥηθῆναι ἄνθρωπος εὐθὺς κατὰ πρόληψιν καὶ ὁ τύπος αὐτοῦ νοεῖται προηγουμένων τῶν αἰσθήσεων. — οὐδ' ἂν ὀνομάσαι μὲν τι, μὴ πρότερον αὐτοῦ κατὰ πρόληψιν τὸν τύπον μαθόντες. Ib. 38.

<sup>95</sup> Ib. 31. ἀρκεῖν γὰρ τοὺς φυσικοὺς χωρεῖν κατὰ τοὺς τῶν πραγμάτων φύγγους. Ib. 33, 37.

<sup>96</sup> Ib. 33. ἐναργεῖς οὖν εἰσὶν αἱ προλήψεις. Ib. 50.



advancing this position Epicurus appears to have had in view the opinion of Aristotle, that it is only in the combination of several notions into a proposition that error is possible. Error is possible, according to Epicurus, either in opinion, or in an assumption (*ὑπόληψις*), which is as yet devoid of confirmation by the sensation. For instance, if upon any sensation a certain motion should be felt in the soul, which is always combined with that sensation but yet differs from it, such combination would require confirmation from experience; should it be confirmed or not contradicted, then it is founded in truth; if contradicted, or not confirmed, it is erroneous.<sup>97</sup> To such false opinions the Epicureans reduced whatever is usually called illusions of the senses. When, for instance, a tower at a distance appears round, and we combine the visual impression of roundness with the conception of the tower, but afterwards upon approaching to the tower find it to be square, our subsequent impression contradicts our previous opinion, without, however, making the earlier sensation to be erroneous.<sup>98</sup>

<sup>97</sup> Ib. 34, 50, 51. τὸ δὲ διημαρτημένον οὐκ ἂν ὑπῆρχεν, εἰ μὴ ἐλαμβάνομεν καὶ ἄλλην τινὰ κίνησιν ἐν ἡμῖν αὐτοῖς, συνημμένην μὲν, διάλειψιν δὲ ἔχουσαν. κατὰ ταύτην τὴν συνημμένην τῇ φανταστικῇ ἐπιβολῇ, διάλειψιν δὲ ἔχουσαν, εἰ μὲν μὴ ἐπιμαρτυρηθῇ ἢ ἀντιμαρτυρηθῇ, τὸ ψεῦδος γίνεται. εἰ μὲν δὲ ἐπιμαρτυρηθῇ ἢ μὴ ἀντιμαρτυρηθῇ τὸ ἀληθές. Sext. Emp. adv. Math. vii. 210, sqq. There is an important difference between the statement of Sextus and the words of Epicurus himself. According to the former, an opinion is true when it is confirmed *and* not contradicted; this doctrine is certainly what we should expect from the nature of the case, but according to Epicurus, it is true when it is confirmed *or* not contradicted. This is evidently a concession in favour of the atomistic theory, of which more hereafter. I have put *διάλειψιν* for *διάληψιν* in the passage of Diog. Laert., although, in ib. 58, the latter word appears to be correct.

<sup>98</sup> Plut. adv. Col. 25.

Such is the simple theory of the Epicureans concerning human knowledge. Any more extensive investigation into the forms of human thought, or the right method of science, was held by them to be unnecessary, since, for the advancement of natural science, little more is requisite than a steady and consistent use of the terms by which its objects are indicated.<sup>99</sup> Definitions, according to Epicurus, are useless; it is sufficient to refer to the sensuous impression which gave rise to the conception.<sup>100</sup> That he should have denied the validity of the principle of contradiction is only explicable by the fact, that he made the truth of opinions to consist in the combination of several sensuous impressions.<sup>101</sup> Now it is impossible to deny that opposite and even contradictory sensuous impressions may be combined together. But what, in general, is the view of Epicurus concerning truth? He assumes it to be a certain vague, inexplicable, and indefinable resemblance between sensations and their objects; but it is not on sensations, assuredly, that the truth of thought and language rests. This truth is produced by general notions, by words, and their combination. But, according to the Epicureans, the expressible (*τὸ λεκτόν*),—that which the word or the general conception signifies,—is nothing.<sup>102</sup> From this position the consequence has

<sup>99</sup> Diog. Laert. x. 31. *τὴν διαλεκτικὴν δὲ ὡς παρέλκουσαν ἀποδοκιμάζουσιν. ἀρκεῖν γὰρ τοὺς φυσικοὺς χωρεῖν κατὰ τοὺς τῶν πραγμάτων φθόγγους.* Cic. de Fin. i. 7.

<sup>100</sup> Sext. Emp. adv. Math. vii. 267; Cic. l. l. tollit definitiones. Epic. ap. Diog. Laert. x. 37.

<sup>101</sup> Cic. de Nat. D. i. 25.

<sup>102</sup> Sext. Emp. Hyp. Pyrrh. ii. 107. *οἱ μὲν Ἐπικουρείοι φασὶ μὴ εἶναι τ. λεκτόν.* Adv. Math. viii. 13, 258; Plut. adv. Col. 15 fin., 22.

not been unfairly drawn, that they made truth a mere matter of language. At all events, we everywhere find their doctrine tending to such a result, although they do not appear ever to have arrived at a clear consciousness of it.

PHYSICS. We have seen that Epicurus considered a correct system of physiology to be a desideratum for his Ethics, in order to free the human mind from the idle fears of vain fables, and that he had no other object in constructing his Canonic than to gain an organon for physiology; accordingly, we might fairly expect to find the latter most carefully adjusted to the two other parts of his philosophy. In this, however, we are sorely disappointed. Indeed, there is nothing more indicative of the superficial vanity of the man than this total disagreement of his Physics both with the Ethics and the Canonic. There are undoubtedly points of contact between them; a similar tone of thought and sentiment speaks throughout all alike, but they are wholly destitute of anything like agreement in a common scientific principle or basis.

In his physiology, Epicurus adopted the atomic theory of Democritus. The investigation of nature, for its own sake, had no charms for a mind like his, so no surprise can be felt that he should not have proposed any new and original theory; still it is strange that, among all the systems of the ancient masters, he should have adopted one otherwise so little suited to the general body of his doctrine. Nevertheless, he was not without many reasons for his choice. The atomistic theory has ever been a favourite with the votaries of sensual enjoyment: and even though, in its oldest

form especially, it does not remount to merely sensible grounds of existence, nevertheless, there is no very great difference between the Democritean atoms and purely sensible elements, since, even if all else that is sensible be abstracted from them, they still retain corporeity; and, properly, are nothing more than sensible entities, so minute as to be hardly perceptible by the sensuous faculty. Moreover, it resolves everything into individual existences, a result highly favourable to a selfish theory of pleasure; and while it denies the absolute and the universal, and every higher force or energy, it is alike hostile to religion and to superstition. These are the foes whom Epicurus everywhere contends against. He is one of those common herd of teachers, who think they have got rid of an opponent when they have closed their eyes against his presence; who deny, but never remove a difficulty. In this respect the atomistic theory appeared well calculated to promote the object of his ethical doctrines; its tendency is to counteract the fears which are the attendants of superstition, since, by dissolving all things into the minutest particles, it leaves nothing behind powerful enough to threaten or alarm the human mind. Such advantages, which the atomistic doctrine presented for the furtherance of the views of Epicurus, in all probability charmed him into the adoption of it. He cared little whether in other points it directly contradicted his general theory.

In the first place, the very basis on which it rests, is utterly inconsistent with the Canonic. Atoms and a void are perceptible neither by sensation nor conception. Epicurus himself declares that it is

inconceivable that an atom should be visible, since it is without colour,<sup>103</sup> and, consequently, no notion can be given of an atom. He must, therefore, class atoms and a vacuum under the unknown, or not manifest, of which a knowledge is not attainable except through an observed agreement with phenomena. The method, however, which Epicurus gives us for attaining a knowledge of the non-manifest, will never lead to the admission either of a vacuum or of atoms. Democritus rightly saw that both these grounds and principles of his theory, can only be known by the intellect. Epicurus, however, had cut himself off from this resource by resolving all intellectual notions into mere sensation. It is true, he believed that a vacuum is clearly proved by the phenomena of motion, which he maintained could not be possible without the existence of a void;<sup>104</sup> but this, surely, is not to employ phenomena for the explanation of the unknown, but rather to draw conclusions from phenomena to what is not manifest in them. In like manner, he attempted to refute the doctrine of the infinite divisibility of the spacial, by an argument which cannot be legitimated by phenomena merely. The argument is, that if matter be infinitely divisible, then, by dividing all, we should reduce it to non-being; for which reasoning he is evidently indebted to Zeno.<sup>105</sup> Again, it is only, in a certain

<sup>103</sup> Ap. Diog. Laert. x. 44, 56. οὐθ' ὅπως ἂν γένοιτο ὁρατὴ ἀτομος, ἔστιν ἐπινοῆσαι. From this he also infers, what Democritus had omitted to observe, that atoms are incapable of having every kind of magnitude; for, he says, if there were any others than very minute atoms, then they would be visible. This again is a very superficial conclusion.

<sup>104</sup> Ap. Diog. Laert. x. 40; Sext. Emp. adv. Math. vii. 213.

<sup>105</sup> Ap. Diog. Laert. x. 56.

respect, that the denial of any other than corporeal entity, can be reconciled with the Canonic; if, that is, whatever does not directly manifest itself as corporeal, must nevertheless be conceived of as such, on account of certain phenomena with which it is combined.<sup>106</sup> But even here the consistency of his doctrine is only preserved by his starting with too close a limitation of the domain of sense, and confining his attention to corporeal, to the exclusion of mental, phenomena. Moreover, even if the predilection of Democritus for mathematical physics affords some explanation why he should have limited the properties of his atoms to magnitude and figure, and of all physical qualities to that of gravity alone, this is far from being the case with Epicurus. It is impossible to see why he should not have assumed certain sensible elements, similar, for instance, to the seeds of Anaxagoras; unless, perhaps, he was prevented by his concurrence with the Socratic doctrine of the relativity of all sensuous phenomena,<sup>107</sup> although, in truth, this was a doctrine far beyond the range of his empirical habit of thought, and irreconcilable with his hypothesis of even corporeal elements. It is manifest, therefore, that Epicurus in his *Physics* everywhere sets out with suppositions which his own Canonic invalidates. According to its principles, he may, indeed, have regarded the theory of atoms as an opinion which did not admit of contradiction, any more than of confirmation; and this, perhaps,

<sup>106</sup> *Ib.* 39.

<sup>107</sup> *Plut. adv. Col.* 6, 7. Hereto refers also the argument drawn from the mutability of sensible qualities, which, however, the system of Anaxagoras explains equally well. *Diog. Laert.* x. 54.

was the reason why he assumed the truth of those opinions which are not contradicted by experience. Such an assumption proves how low was his estimate of the truth of human science; and in fact, this was a natural consequence of a view which limited the value of science to its bearing on the wants of practical life. According to the principles of his physiology, Epicurus could not admit of any knowledge of that which really and truly is, since he resolved all things into atoms and void, which he declared to be both imperceptible and inconceivable, and, consequently, to elude cognition. In truth, he looked for no such knowledge; and his theory of nature had no higher object, than to assure the mind against alarm at its portentous phenomena. f

It is unnecessary to repeat here those determinations of the atomical system which Epicurus borrowed, without modification, from Democritus. In our exposition of the physiology of Epicurus, we shall confine ourselves to a notice of its deviations from the Democritean, and to exhibiting the peculiar direction of his opinions relatively to his Ethics and Canonic. Moreover, in order to connect these two topics, it will be necessary to give a slight outline of those fundamental features of this theory of atoms, which are presented in the statements concerning Epicurus, more distinctly than in those relating to Democritus. The hypothesis of invariable atoms was necessary, in order to furnish stable and permanent recipients of the changeable sensible qualities.<sup>108</sup> The number of these atoms

<sup>108</sup> Epic. ap. Diog. Laert. 41, 54.

is made to be infinite because, in the infinity of void, a finite number would be carried about in disorderly and incessant motion.<sup>109</sup> An infinite vacuum is necessary, partly to give room for the motion of the infinite atoms, and partly to separate them from each other.<sup>110</sup> In this void the atoms are, from eternity, precipitated downwards, for they possess gravity, and there is nothing to support them; in this descent, however, they all move with the same velocity, since the void yields equally to the lightest and to the heaviest atoms.<sup>111</sup> Here, however, Epicurus has considerably modified the system of Democritus by supposing that, in their fall, the atoms decline somewhat, however insensibly, from the perpendicular. It cannot be said that, by this hypothesis, he has given greater consequentiality to the atomical theory; indeed, he only seems to have intended by it to get rid of a difficulty which he himself had created. For, although he did not assume any commencement of the formation of the world, he yet conceived of the atoms as at one time descending without intermixture, and without any motion externally impressed upon them, and with equal velocity; and, in this case, it is clear that such a motion, being invariably perpendicular, could not give rise to any corporeal combination, or to the sensible world.<sup>112</sup> But a still more powerful mo-

<sup>109</sup> Ib. 41, 42.<sup>110</sup> Ib. 42, 44.<sup>111</sup> Ib. 43, 61, 73.<sup>112</sup> Ap. Diog. Laert. x. 59; Cic. de Fin. i. 6; Lucret. de Rer. Nat. ii. 216,

Quod nisi declinare solerent, omnia deorsum  
 Imbris uti guttæ caderent per inane profundum,  
 Nec foret offensus natus, nec plaga creata  
 Principiis; ita nil unquam natura creasset.



tive led Epicurus to assume this irregular deviation from the perpendicular in the descent of bodies, and this was, his aversion for anything like a force of necessity ; which, however, he would have been constrained to admit, if he had sought to explain the existence of all things by the necessary descent of the atoms in a right line, and by virtue of some foreign impelling cause. In this, then, we trace the influence of his ethical system upon his physical theory. It would, he says, be better to believe the fabled power of the gods, who, at least, are said to be flexible to prayer, than the opinion of physiologists concerning the inexorable power of fate.<sup>113</sup> But to escape this dreaded power of necessity, Epicurus saw no other means left, than to admit that the atoms, by virtue of an internal force, which is independent of their weight, can deviate, however slightly and insensibly, from a right line ; and it is only by such a supposition that he can satisfactorily account for the freedom of the will. This is the sole trace, in the theory of Epicurus, of a perception that a certain inward energy, independent of, and besides their external nature, must be ascribed to the atoms. But even this inward force is conceived of as of a purely arbitrary effort ; for he derives the contingency of natural phenomena from the same source as the freedom of the will.<sup>114</sup> For, as

<sup>113</sup> Ap. Diog. Laert. x. 134. ἐπεὶ κρεῖττον ἢν τῷ περὶ θεῶν μύθῳ κατακολουθεῖν, ἢ τῷ τῶν φυσικῶν εἰμαρμένῃ δουλεύειν· ὁ μὲν γὰρ ἐλπίδα παραιτήσεως ὑπογράφει θεῶν διὰ τιμῆς, ἡ δὲ ἀπαραίτητον ἔχει τὴν ἀνάγκην.

<sup>114</sup> Plut. de solert. Anim. 7. ἄτομον παρεγκλίνει μίαν ἐπὶ τοῦλάχιστον, ὅπως ἄστρα καὶ ζῶα καὶ τύχη παρεισέλθῃ καὶ τὸ ἐφ' ἡμῖν μὴ ἀπόληται. Cic. de Nat. D. i. 25 ; de Fato, 20. Qui aliter obeistere fato fatetur se non potuisse, nisi ad has commenticias declinationes confugisset. Lucret. ii. 284.

the formation of all natural phenomena depends upon these irregular deviations of the atoms, so Epicurus teaches that all depends upon chance, or upon us;<sup>115</sup> in whom, forsooth, a volition prevails as arbitrary as the deviation from the laws of falling bodies.

It is from the above principles that Epicurus attempts to derive and account for all natural phenomena. The atoms, colliding with, and repelling each other, generate a rebounding, oscillating motion (*ἀποπαλμός*).<sup>116</sup> They also combine together, in certain systems, which, thereupon, constitute visible bodies and worlds. The atoms, being infinite in number, may constitute an infinity of worlds, similar and dissimilar to our own, of the greatest variety in form, and both arising and passing away without any necessary law. The idea which Epicurus entertained of a world, was naturally very vague and arbitrary; his imagination took pleasure in the conception of the most diversified worlds, and in describing the modes of their formation.<sup>117</sup> Such, indeed, is the general character of his physiology: its chief object is to represent whatever is most fixed and constant in the course

Quare in seminibus quoque idem fateare necesse est,  
Esse aliam præter plagas et pondera causam  
Motibus, unde hæc est nobis innata potestas,  
De nihilo quoniam fieri nil posse videmus.  
Pondus enim prohibet, ne plagis omnia fiant  
Externa quasi vi; sed ne mens ipsa necessum  
Intestinum habeat cunctis in rebus agendis  
Et devicta quasi cogatur ferre patique,  
Id facit exiguum clinamen principiorum  
Nec ratione loci certa, nec tempore certo.

<sup>115</sup> Ap. Diog. Laert. x. 133. ἀλλὰ τὰ μὲν ἀπὸ τύχης, τὰ δὲ παρ' ἡμῶν.

<sup>116</sup> Ib. 44.

<sup>117</sup> Ib. 45, 74, 88.

of nature, as something purely contingent and indeterminate, or to show that similar phenomena may arise from dissimilar causes. They, he says, are fools, who believe that every phenomenon that recurs regularly, is brought about in obedience to a necessary law, or, forsooth, in virtue of an eternal agency of the Deity in nature. In physics, he says, it ought never to be forgotten, that the same phenomena may have at one time one, and at another a different cause, and every possible cause must be admitted as a sufficient explanation of any natural event or object. By such arguments did Epicurus oppose the physiologists, who investigated nature upon scientific principles.<sup>118</sup> The general bias of the physical speculations of Epicurus were derived from the character of his moral theory. His object was, to free the human mind from all dread of those powers of nature which, according to the ancient physiologers, sway the destinies of man: accordingly, he strives, as much as possible, to degrade them into mere insignificant and unimportant phenomena. In pursuit of such an object, his physical explanations sink to the level of those which marked the first essays of the infancy of science. Of this we shall adduce a few instances. The size of the sun, and the other stars, relatively to man, is such as it appears, neither more nor less; that is to say,

<sup>118</sup> A few passages from the Meteorology of Epicurus will suffice to prove that he is not here painted in too broad a colour. Ap. Diog. Laert. x. 93—98. οἱ δὲ τὸ ἐν λαμβάνοντες τοῖς τε φαινομένοις μάχονται καὶ τοῦ τί δυνατὸν ἀνθρώπῳ θεωρῆσαι διαπεπτώκασιν. Ib. 113. τὸ δὲ μίαν αἰτίαν τούτων ἀποδιδόναι, πλεοναχῶς τῶν φαινομένων ἱκαλουμένων, μανικὸν καὶ οὐ καθηκόντως πραττόμενον ὑπὸ τῶν τὴν ματαίαν ἀστρολογίαν ἰζηλωκόντων καὶ εἰς τὸ κενὸν αἰτίας τινὰς ἀποδιδόντων, ὅταν τὴν θείαν φύσιν μηδαμῇ λειτουργιῶν ἀπολύωσι.

it is properly of no moment to man to know what is the true and actual magnitude of the sun, but merely to know what is the sensible impression it occasions him. Nevertheless, Epicurus cannot wholly renounce a curiosity to discover its objective or real magnitude; yet on this point he believes it is impossible to ascertain anything; this alone is certain, that it is either somewhat larger, or somewhat smaller than, or precisely as large as, it appears to human observation; for it appears to be analogous to fires seen at a distance; if, then, the sun loses, in apparent magnitude, by remoteness, it must also lose in its apparent colour.<sup>119</sup> It is perfectly worthy of such a system, to leave it as a matter of mere choice, whether to follow the opinions of the later astronomers, that the rising and setting of the sun and moon, and the other stars, are to be explained by their motion round the earth, or to subscribe to the hypothesis of the earlier physiologers, that the heavenly bodies are daily extinguished and renewed.<sup>120</sup> It is equally a

<sup>119</sup> Ap. Diog. Laert. x. 91. τὸ δὲ μέγεθος ἡλίου τε καὶ τῶν λοιπῶν ἀστρῶν κατὰ μὲν τὸ πρὸς ἡμᾶς τηλικούτον ἐστίν, ἡλίκον φαίνεται· κατὰ δὲ τὸ κατ' αὐτὸ ἦτοι μείζον τοῦ ὁρωμένου ἢ ἔλαττον μικρῶ ἢ τηλικούτον, ἡλίκον ὁράται· οὕτω γὰρ καὶ τὰ παρ' ἡμῖν πυρὰ ἐξ ἀποστήματος θεωρούμενα κατὰ τὴν αἴσθησιν θεωρεῖται. I have given this passage without the insertion which Diogenes has made of a passage from some other work of Epicurus, in order that the context may be better understood. The inserted passage is as follows: τοῦτο καὶ ἐν τῇ ἐνδεκάτῃ περὶ φύσεως, εἰ γάρ, φησί, τὸ μέγεθος διὰ τὸ διάστημα ἀποβεβλήκει, πολλῶ ἂν μάλλον τὴν χροάν· ἄλλο γὰρ τούτῳ συμμετρώτερον διάστημα οὐθέν ἐστιν. Commentators have not considered it as an intercalated passage, and have, in consequence, tormented themselves in vain to explain it. The sense of the passage is: 'For no interval is more proportional to this, than that between the colour of the sun and us.' Schneider and others have unjustly blamed Cicero and Nicomedes for wrongfully imputing to Epicurus, on account of this passage, an ignorance of astronomy.

<sup>120</sup> Ib. 92.

matter of indifference with Epicurus, whether a man believes that the moon derives her light from the sun, or from herself; for, he says, even upon earth, some bodies have a light of their own, others derive it from foreign bodies.<sup>121</sup> So, too, the eclipses of the sun and moon may either be accounted for, conformably with the astronomers, by the intervention of other bodies, or by the supposed extinction of those luminaries.<sup>122</sup> Many other puerilities of a like nature might be adduced; but enough has been alleged to show how, with a spirit of scepticism, the fruit of his own ignorance, Epicurus rejects the results of astronomical research, and, with superficial presumption, talks of the slavish pursuits of the astronomers,<sup>123</sup> wherever he finds it inconvenient to be taught by them.

As to the origin of living beings, his theory is almost silent. Nevertheless, this was an important part of nature for the consideration of Epicurus, by reason of the soul, which is the associate of life. In his doctrine of the soul he does little more than follow Democritus. The soul he naturally looked upon as something corporeal; for nothing, according to Epicurus, is incorporeal, except vacuum, which is without either action or passion, and only admits the free passage of bodies through itself. It is, therefore, absurd to call the soul incorporeal, which is visibly both active and passive.<sup>124</sup> As the soul

<sup>121</sup> Ib. 94.<sup>122</sup> Ib. 96.<sup>123</sup> Ib. 93.

<sup>124</sup> Ib. 67. καθ' ἑαυτὸ δὲ οὐκ ἔστι νοῆσαι τὸ ἀσώματον πλὴν ἐπὶ τοῦ κενοῦ. τὸ δὲ κενὸν οὔτε ποιῆσαι οὔτε παθεῖν δύναται, ἀλλὰ κίνησιν μόνον δι' ἑαυτοῦ τοῖς σώμασι παρέχεται· ὥσθ' οἱ λέγοντές ἀσώματον εἶναι τὴν ψυχὴν ματαιάζουσιν· οὐθὲν γὰρ ἀν' ἐδύνατο ποιεῖν οὔτε πάσχειν, εἰ ἦν τοι-

animates the whole living body, it must be diffused throughout the whole bodily frame. It is invisible, but suffers a great variety of changes; it must, consequently, be a very rare body, and one which can be easily moved. He compares it to a breath combined with a certain quantity of warmth. It consists of round and smooth atoms, which, consequently, move easily.<sup>125</sup> Experience discovers four activities of the soul: it is the cause of motion and repose, of the warmth of the body, and of sensation. Each of these activities are referred by Epicurus to a distinct element in the composition of the soul; motion to breath, repose to air, animal warmth to fire, and sensation to a nameless species of atoms, which are extremely delicate and excitable.<sup>126</sup> Three of these constituent elements of the soul are distributed in equal parts throughout the body, the last has its principal seat in the breast. This is an attempt, however gross, to account for the unity of the rational soul.<sup>127</sup> The animated body and the animating soul are mutually dependent; for the former cannot be animated without the latter, and the body, when the soul has quitted it, is without sensation or motion; in the same

αὐτῇ. νῦν ἐναργῶς ἀμφότερα ταῦτα διαλαμβάνομεν περὶ τὴν ψυχὴν τὰ συμπτώματα.

<sup>125</sup> Ib. 63, 66.

<sup>126</sup> Lucret. de Rer. Nat. iii. 227 sqq.; Stob. Ecl. i. p. 798. Ἐπίκουρος κρᾶμα (εἶναι τὴν ψυχὴν) ἐκ τεττάρων, ἐκ ποιοῦ πυρώδους, ἐκ ποιοῦ ἀερώδους, ἐκ ποιοῦ πνευματικοῦ, ἐκ τετάρτου τινὸς ἀκατονομάστου, τοῦτο δ' ἦν αὐτῷ τὸ αἰσθητικόν· ὡς τὸ μὲν πνεῦμα κίνησιν, τὸν δὲ ἀέρα ἡρεμίαν, τὸ δὲ θερμὸν τὴν φαινομένην θερμότητα τοῦ σώματος, τὸ δ' ἀκατονόμαστον τὴν ἐν ἡμῖν ἱκανοῦν αἰσθησιν· ἐν οὐθένι γὰρ τῶν ὀνομαζομένων στοιχείων εἶναι αἰσθησιν.

<sup>127</sup> Ap. Diog. Laert. x. 66.

manner, the soul, out of the body, has neither motion nor sensation ; it is, as it were, clothed by the body, and when the body is dissolved, the soul also is dispersed into its elements.<sup>128</sup> The soul, being composite, naturally admits of decomposition, which takes place, of necessity, upon the dissolution of the body, by which it is protected against the influence of external forces.

We have now only to notice briefly the Epicurean theory of sensation. This he simply explains by a supposed emanation, from all bodies, of certain effluxes, which, entering the body through the organs of sense, originate certain motions in the soul. This explanation is nothing more than the Democritean doctrine of certain corporeal images (*εἰδωλα*), which are the exciting causes of sensation, and Epicurus has but enlarged it in a few unessential points. He attempts, for instance, to account for the fact that sensation takes place at an almost insensible interval after the entrance of the corporeal effluxes, by asserting that these corporeal images, being extremely delicate and fine, are able to penetrate through the pores of objects with infinite velocity.<sup>129</sup> To account for the possibility of perceiving images of such extreme delicacy and fineness, Epicurus supposed that by means of the organs of sense, collections and aggregations of them are formed, which produce a stronger impression than they could singly.<sup>130</sup> He also attempts to determine the difference between

<sup>128</sup> Ib. 64—66 ; Epic. ap. Sext. Emp. adv. Math. ix. 72. ἀπολυθεῖσαι τῶν σωμάτων καπνοῦ δίκην σκίδναιται.

<sup>129</sup> Epic. de Natura, ii. ; ap. Diog. Laert. x. 47.

<sup>130</sup> Ib. 48 ; Lucret. iv. 103 sqq. ; 735.

the representations of the imagination and original perceptions: the former, he says, are produced by finer, the latter by coarser images; <sup>131</sup> moreover, the latter retain a certain correspondence or analogy to the objects from which they emanate, and retain a certain unity which agrees with their objects, whereas the former are changeable. <sup>132</sup>

The theology of Epicurus is, in many respects, obscure and unintelligible. He admits the existence of gods of human form, but free from the wants and weaknesses of humanity, and without solid bodies; who, in the void intervals between the infinite worlds, pass a life undisturbed by aught, and enjoy a happiness which admits not of augmentation. Two attributes he invariably ascribes to the Deity, immutability and happiness; and from the latter attribute he draws the consequence, that the gods do not concern themselves about human affairs; for, he argues, happiness is repose, and on this account the gods neither take trouble to themselves, nor cause it to others. In consequence, he zealously opposes the popular fables of the gods, which he declares to be full of inconsistencies; and does not scruple to avow his disbelief of the national theology. <sup>133</sup> Now, if when considered solely in their own nature, the inactive gods of Epicurus appear strange enough, they play a still more singular part in his general theory. For how

<sup>131</sup> Lucret. iv. 765.

<sup>132</sup> Diog. Laert. x. 32, 52, 53. The matter is expressed very obscurely. The expression *ἡραίσθησις*, which I would compare with *ἐπιμαρτυρεῖσθαι*, appears to belong hereto.

<sup>133</sup> Ap. Diog. Laert. x. 121, 123, 124, 139; Sext. Emp. Hyp. Pyrrh. iii. 219; Cic. de Nat. Deor. i. 17 sqq.; de Div. ii. 17.



are we to account for the existence of these indestructible forms, which yet are without solidity, these bodies which are not bodies,<sup>134</sup> alongside of that concretion of the elements which otherwise constitutes all perishable bodies? Where is there, in the whole system of Epicurus, a point to which the conviction of a divine existence can confidently attach itself? This difficulty has suggested a doubt of the sincerity of his belief in the existence of gods. It has been pretended that his strange conceptions of deity were put forward with no other view than to screen himself against a charge of atheism;<sup>135</sup> as if, forsooth, there was much reason to apprehend such an accusation in an age which openly denied and scoffed at religion; and as if, moreover, in the case of a disposition to bring such a charge against him, sufficient grounds to support it could not have been found in his open disavowal of the popular faith! But, independently of the improbability of this pretended atheism, his very theory of knowledge afforded some ground for the admission of the possibility, at least, of gods. The idea of God, he found to be universally prevalent.<sup>136</sup> How is its origin to be explained? In any case it must be a conception resulting from antecedent perceptions. Accordingly, Epicurus believed that the conceptions of a God draw their origin from divine manifestations in sleep and in waking, to which

<sup>134</sup> Cic. de Nat. Deor. i. 25. Dum individuorum corporum concretionem fugit (sc. Epicurus), ne interitus et dissipatio consequatur, negat esse corpus deorum, sed tamquam corpus, nec sanguinem, sed tamquam sanguinem.

<sup>135</sup> This supposition is referred to Posidonius the Stoic. Cic. de Nat. Deor. i. 30, 44; Sext. Emp. adv. Math. ix. 58.

<sup>136</sup> Ap. Diog. Laert. x. 123. ἡ κοινὴ τοῦ θεοῦ νόησις. Cic. de Nat. Deor. i. 16.

there must be certain corporeal images to correspond, but which are so fine as to be perceptible to the soul alone, and not to the external senses.<sup>137</sup> So frequently does it happen, that the bold spirit who denies the existence of a God, believes in and trembles at a spectre! With a religious belief resting on so weak a foundation, it would have been easy enough to account for these images of the gods, by a supposed coincidence in the air of certain corporeal forms; but the contrary opinion, that they emanate from real beings, could not be contradicted by experience; indeed, its truth seemed, in some measure, to be attested by the constancy and similarity of their recurrence,<sup>138</sup> which is not the case with the unreal forms of the imagination. To these arguments Epicurus is said to have further added, that according to the equal distribution which holds throughout the world, as there is a mortal nature, there must also be an immortal one.<sup>139</sup> It is clear that the general theory of Epicurus did not furnish any sure ground for the assumption of a divine existence; but, on the other hand, it did not offer any insuperable argument against it: such being the case, Epicurus may have deemed it more safe and more prudent to conform to the view generally entertained on this subject; but, at the same time, to modify it, and to employ it for the refutation of all those opinions which

<sup>137</sup> Sext. Emp. adv. Math. ix. 25, 43; Cic. de Nat. Deor. i. 18; Epic. ap. Diog. Laert. x. 123. *ἐναργές μὲν γὰρ ἔστιν αὐτῶν (sc. τῶν θεῶν) ἡ γνῶσις.* Ib. 139. *τοὺς θεοὺς λόγῳ θεωρητοὺς εἶναι.* Plut. de Plac. Phil. i. 7.

<sup>138</sup> Ap. Diog. Laert. x. 139. *οὕς δὲ κατὰ ὁμοιδίαν ἐκ τῆς συνεχοῦς ἐκφύρουσιν τῶν ὁμοίων εἰδώλων ἐπὶ τὸ αὐτὸ ἀποτελεσμένους ἀνθρωποειδῶς.*

<sup>139</sup> Cic. de Nat. Deor. i. 19, 39.

would inspire an idle fear of the gods, and might disturb the calmness which ought to possess the soul of the sage.

The several doctrines of Epicurus are far from constituting a coherent and well-adjusted whole. His Physiology is inconsistent with his Canonic. Made, as it were, the complement of the Ethics, and intended to furnish consolation to the sage, and to emancipate him from all superstitious dread of gods or fate, it cannot accomplish this object but by introducing a blind chance into the world, and by banishing all law and order from the course of nature; and even when it would assure the sage against the horrors of destiny, it subjects him to a force of hazard as great and irresistible as that of necessity. But the sage himself is the issue of chance: he cannot come into being except by the fortuitous concurrence of certain atoms in such relations as to form a body and a soul. Moreover, the assumption of Epicurus, that he who has once become a sage will never cease to be such,<sup>140</sup> is not in accordance with the principles of his Canonic; according to which, all opinions respecting the future are mere hypotheses. In short, sufficient has been said to show that the Physics and the Canonic of Epicurus are nothing but an incongruous appendage to the Ethics. As to the latter, who can praise it, either for the truths which it contains, or for its originality, or for the perspicuous enchainment of the thought? Original it is not; for it does but utter more frankly what all little and narrow-

<sup>140</sup> Diog. Laert. x. 117; Plut. adv. Col. 19.

minded men think within themselves, more or less unconsciously, and what Democritus, moreover, had already taught publicly. As to its enchainment of ideas, it is impossible to call that a well-digested body of doctrine which would blunt the sensibility for pain without perceiving that whatever deadens the sense of suffering must, at the same time, blunt the keenness of the sense of pleasure; which assumes the air of despising physical gratifications, at the very time that it derives all pleasure from corporeal enjoyments; and which, while it proposes an end for the whole conduct of life, parcels it out into many little and separate fragments of enjoyment! What truth, lastly, can there be in a system which selfishly limits man to himself, and acknowledges no other object of human exertion than is to be found within the compass of the fleeting phenomena of the present existence? If, in truth, the being and existence of man must be resolved into a simple phenomenon of nature, it would, certainly, be more consistent and more prudent of him to abandon himself, with Aristippus, to the enjoyment of the present moment, than, throughout the whole course of life, to corrupt the present pleasure by a senseless care and fear for the future. That which, on the one hand, appears to be in favour of the Epicurean theory, is, on the other, prejudicial to its consistency. Nevertheless, however lowly we may estimate the scientific worth of the Epicurean doctrine, we are far from thinking that it has been wholly devoid of instruction to succeeding ages, or even to all time. It was one of those essays which must necessarily be made in the progress of humanity.

The attempt to develop certain ideas must be made, in order to convince man that it is fruitless and impracticable.

For a long series of time, the doctrine of Epicurus ever had many adherents, and its principle still finds advocates. Nevertheless, the theory has never advanced. In this there is nothing astonishing; for, in all its parts, it trips so lightly over the greatest difficulties, that it could never gain the attention and concurrence of any but the most superficial of thinkers. It was not the fruit of any lively scientific impulse, but the issue of a single wish to console man in the corruption and misery, both of his age and his own mind, by adopting the first opinion that might offer itself adapted to such an end. For those, alone, who had no higher wish, it had a charm. Happily, we may pass them over without mention; for the object of our work is not to give a catalogue of names, but a history of opinion.

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# HISTORY OF PHILOSOPHY.

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## BOOK XI.

### HISTORY OF THE SOCRATIC SCHOOLS.

#### PART V.

#### THE STOICS. CORRUPTIONS OF THE ANCIENT SCHOOLS. CONCLUSION.

#### CHAPTER I.

#### LIFE AND WRITINGS OF THE STOICS. FORMATION AND PERFECTION OF THEIR SYSTEM.

IN our notice of the Epicureans we had to consider that aspect of philosophy which it took in the decline of the political existence of Greece, and the corruption of practical life, when, in despair for the interests of humanity, it evinced a disposition to a low and degrading view of moral duty. We have now to consider it under another aspect, in the opinions of those who, still influenced by an earlier mental enlightenment, felt conscious of possessing courage enough to resist the evil tendency of their age; who, although they might entertain but little hope of reclaiming the general character of their nation, still hoped to awaken true wisdom, virtue, and science, in the minds of a few better gifted individuals. Such were the efforts of the Stoics.

Their system, which dates its origin somewhat later than the Epicurean, is evidently more noble than it, and also more scientific than that of the Sceptics.

Zeno of Cittium, a small city in the island of Cyprus, of Phœnician origin, but inhabited by Greeks, is generally given as the founder of the Stoical school. The time of his birth cannot be accurately fixed, and indeed the whole chronology of his life is very confused.<sup>1</sup> It is, however, certain that he taught at Athens, in the time of Antigonus Gonatas, and, in all probability, died a short time before that monarch.<sup>2</sup> His father was a merchant, and he himself was, in his youth, engaged in trade and commerce; when, however, after a voyage to Athens, his father brought home with him the works of Socrates, Zeno was attracted by them to the study of philosophy.<sup>3</sup> He was of mature years when he first visited Athens on business, where, having lost his all in a shipwreck, he took refuge in philosophy; not, however, without feeling a secret bias to such pursuits.<sup>4</sup> The life of a cynic appearing likely to afford him consolation in his poverty, Zeno became a disciple of Crates, and it is manifest enough that in his view of moral life he has adopted many of the opinions of the Cynics. Nevertheless, both his moral sensibility revolted against the gross-

<sup>1</sup> Cf. Clinton's *Fasti Hellenici*, p. 367 sqq. Of the dates that are given, all are doubtful. Persæus, a disciple of Zeno, and Apollonius of Tyre, who wrote on the history and opinions of the stoical sect, do not agree in their statements.

<sup>2</sup> The former point follows from several anecdotes; the latter is implied by Diog. Laert. vii. 15.

<sup>3</sup> Diog. Laert. vii. 31.

<sup>4</sup> The story is told in different ways. Diog. Laert. vii. 2, 4, 5; Senec. de Tranqu. an. 14; Plut. de Tranqu. an. 6; de Cap. ex Inim. Util. 2. He was twenty or thirty years old when he came to Athens. Diog. Laert. vii. 2, 28.



ness of their habits,<sup>5</sup> and his scientific mind did not find ample food in the scanty wisdom of Crates. He, accordingly, sought a fuller intellectual supply from Stilpo of Megara, who combined austerity of practice with great extent of knowledge.<sup>6</sup> From the latter, and from Diodorus Cronos, whom he is also said to have heard,<sup>7</sup> he may have learned to estimate rightly the importance of the precise investigations of logic. But it is also probable that even the doctrines of the Megarian school appeared to him too meagre to furnish a truly philosophical view of the universe; and, in this respect, Plato may have appeared to him more promising. However this may have been, there exists an uncontradicted statement that he left the Megarian school for the Academy, where he heard the lessons of Xenocrates and Polemo, or, more probably, of the latter alone.<sup>8</sup> Altogether, he is said to have spent twenty years in these philosophical studies;<sup>9</sup> and he seems to have possessed a rare quickness and tact in seizing whatever, in these diversified lessons, was most in unison with his peculiar habit of thought; since, in his latest years, he mentioned his several teachers with respect,<sup>10</sup> and, in fact, the system which he developed in his school was little better than an attempt to reconcile and combine various elements of different theories. On this

<sup>5</sup> Diog. Laert. vii. 3.

<sup>6</sup> Ib. 24.

<sup>7</sup> Ib. 25; cf. ib. 16.

<sup>8</sup> The statement that he studied under Xenocrates rests on the single authority of Timocrates, an otherwise unknown writer. Diog. Laert. vii. 2.

<sup>9</sup> Ib. 4.

<sup>10</sup> Ib. 20.



ground, the charge has been brought against Zeno, that, differing but little, if at all, from the earlier schools, he attempted to form a school of his own, with a system scarcely original, wherein, in fact, he had changed nothing but names.<sup>11</sup> His school met in the variegated porch (ποικιλῆ) which, formerly the place of meeting of the poets, but now empty, Zeno again made instinct with life and mind. From this circumstance, his followers, who were at first called Zenonians, subsequently received the name of Stoics.<sup>12</sup> The number of his disciples appears to have been considerable, notwithstanding that they were the object of contempt to the more refined, who looked upon them as a continuation of the Cynics. Their school was generally regarded as the resort of the poor, and it was a common joke that poverty was the charm to which Zeno was indebted for his scholars.<sup>13</sup> It, nevertheless, gained a few members from among the rich and powerful, who, perhaps, may have regarded it as a powerful counter-agent to the growing effeminacy of their age; and it numbered Antigonus Gonatas among its admirers. Zeno is said to have presided over his school for fifty-eight years, and, at a very advanced age, to have put an end to his existence.<sup>14</sup> He is praised for the temperance and austerity of

<sup>11</sup> Cic. de Fin. iii. 2; iv. 2 sq.; Tusc. v. 12. Chrysippus found it necessary to compose an express treatise, defending him from this charge of neologism. Diog. Laert. vii. 122.

<sup>12</sup> Diog. Laert. vii. 5.

<sup>13</sup> There are numerous allusions to this point. Diog. Laert. vii. 27; Clem. Alex. Strom. ii. p. 413:

φιλοσοφίαν καινὴν γὰρ οὗτος φιλοσοφεῖ,  
πεινῇν εἰδάσκει καὶ μαθητὰς λαμβάνει.

<sup>14</sup> Diog. Laert. vii. 28 sq.; Suid. s. v. Ζήνων.

his habits, while his abstinence from sensual enjoyments is proverbial.<sup>15</sup> The Athenians are said to have had such confidence in his integrity, that they intrusted to his keeping the keys of their gates;<sup>16</sup> and, after his death, they erected, at the instance of Antigonus, monuments in his honour, which bore the high but simple eulogium, that his life had been in unison with his philosophy.<sup>17</sup>

Of the works of Zeno, a few fragments alone have come down to us. Comparatively speaking, he was not a voluminous writer, and from the titles of his works we are led to conclude that he confined himself to giving a very general sketch of the fundamental principles of his theory, to which he was far from having given that character of extensive erudition which, in subsequent times, was distinctive of the stoical philosophy.<sup>18</sup> Consequently, it has been said of Zeno and his disciple Cleanthes, that they were deficient in the care and industry requisite to work out accurately and completely a philosophical system.<sup>19</sup> Some of his treatises appear to have been written under the influence of his cynical studies: this is the case especially with his *Politics*, which were composed in opposition to Plato, and are often quoted by the ancients to prove that, in the true spirit of a Cynic, Zeno con-

<sup>15</sup> Diog. Laert. vii. 1, 26, 27.

<sup>16</sup> *Ib.* 6.

<sup>17</sup> *Ib.* 10 sq.; 15. The genuineness of this decree has been called in question, but merely on the general ground of the suspicion which attaches to all such documents. Bruckeri Hist. Phil. i. p. 901.

<sup>18</sup> A catalogue of the works of Zeno, which, however, is incomplete, is given by Diog. Laert. vii. 4; cf. Fabr. Bibl. Gr. iii. p. 580.

<sup>19</sup> Diog. Laert. vii. 84.

temned all law, custom, and science.<sup>20</sup> The later Stoics, at least the greater part of them, were entirely free from such a bias, and this may serve to explain the reasons why the genuineness of this treatise was afterwards questioned, and why Athenodorus, one of his disciples, erased from the works of his master and fellow-disciples, which he found in the royal library at Pergamos, all offensive passages of this nature.<sup>21</sup> As a writer, Zeno is usually praised for brevity of style and cogency of reasoning.<sup>22</sup>

It is not easy to determine the amount of Zeno's services in the formation of the stoical system. The fragments and quotations from his works clearly prove that he had at least projected all the main features of the later system of the Stoics; but whether they were presented by him in the systematic precision and distinctness which they subsequently assumed, and were not rather, as they came from his hands, as yet mixed up with much that was extraneous, and with many exaggerations of particular doctrines; or, generally, whether they were not, as a body of doctrine, still devoid of any marked character, may well admit of question. For it is not improbable that, in later notices, the name of Zeno often stands for the whole Stoical school,

<sup>20</sup> Plut. de Stoic. Rep. 6, 8; Diog. Laert. vii. 4; 33 sq.; cf. Theodoret. Gr. Aff. Cur. iii. p. 780, where his contempt of the olden religious worship is spoken of. Of his Politics it was said, that it was written on a dog's tail, and the opinion has been held that it was composed previously to his being a disciple of Crates. His *διαρριβαί* have met with similar censure to his Politics. Sext. Emp. adv. Math. xi. 191; Pyrrh. Hyp. iii. 205, 245. In this class we may also place his *Κράνητος ἡθικά*.

<sup>21</sup> Diog. Laert. vii. 34.

<sup>22</sup> Cic. de Nat. Deor. ii. 7. Cf. Diog. Laert. vii. 18.

with a view, perhaps, to indicate the first author of a system which the later Stoics regarded as the common property of their sect.<sup>23</sup> At its first formation, at least, the Stoical school does not appear to have been very unanimous. Of Athenodorus, we have seen that he disapproved of much which he found in the works of his master and fellow-disciples. Moreover, two of the disciples of Zeno, Aristo of Chios and Herillus of Carthage, openly deviated, in opposite directions, from the views of their common teacher, and founded independent schools. What was the tendency of the former's view, is clear enough from history. He rejected all other parts of philosophy but ethics; physiology, he said, is beyond man; dialectics, or logic, ill suited to him; i. e. the former transcends man's powers, the latter is of no use to him, nay, is even hurtful; it is like slippery clay, which trips up him who walks upon it.<sup>24</sup> He even limited the domain of ethics itself; for he taught that its object is, not to treat of particular duties, and encouragements to virtue, such being the part of nurses and pedagogues; but it is the province of the philoso-

<sup>23</sup> On this account it is difficult to distinguish what belongs to the several Stoics respectively, from what belongs to all in common. Tennemann, in the fourth volume of his *History of Philosophy*, has made the attempt, but he has been driven to rest much upon mere conjecture, and to dismember the unity of the stoical system.

<sup>24</sup> Diog. Laert. vii. 160, 161; Stob. Serm. lxxx. 7; lxxxii. 7, 11, 15, 16; Sext. Emp. adv. Math. vii. 12; Senec. Ep. 89. Aristo of Chios has been frequently confounded with the Peripatetic of the same name from Cos. Of the works imputed to him, all have been questioned except the *Letters*. The *ὑμνῶματα*, however, which are not mentioned by Diogenes, but of which Stobæus has transmitted fragments, are marked with the character of his opinions, and are very dissimilar from any Peripatetic doctrine. The assertion of Diogenes, that he quitted the school of Zeno for that of Polemo, appears to be against chronology.

pher to show wherein the supreme good consists ; for this knowledge is the source of all useful intelligence.<sup>25</sup> In the same spirit we find him condensing the study of those non-scientific branches of knowledge which formed the chief elements of the general education of the Greeks. Those who, to the neglect of philosophy, devoted themselves to the encyclic sciences, he compared to the suitors of Penelope, who, enamoured of the mistress, contented themselves with her handmaids.<sup>26</sup> In accordance with his view, that physics transcends human power, Aristo doubted some of the most important doctrines of Zeno. It is impossible, he said, to form a conception of the shape or sense of the gods ; it is doubtful whether God is or not a living being.<sup>27</sup> The true philosopher, he says, ought to hold himself free from all opinions.<sup>28</sup> From this last position, it is clear that Aristo strongly leaned towards scepticism ; yet he was careful not to extend this doubt to the common branches of knowledge, which are indispensable to the conduct of life.<sup>29</sup> By Cicero, indeed, his name is often coupled with that of Pyrrho, even upon ethical questions. With Aristo, nought is of worth but virtue, nothing is evil but vice. He seeks to refute the opinion that there is such a difference in external things, that one is preferable to another ; the sage, he says, cannot, it is true, wholly dispense with desire, but

<sup>25</sup> Sext. Emp. l. i. ; Senec. l. i. ; Ep. 94.

<sup>26</sup> Stob. Serm. iv. 110.

<sup>27</sup> Cic. de Nat. D. i. 14. It is singular to notice how, on this point, Cicero coincides with Strato.

<sup>28</sup> Diog. Laert. vii. 162.

<sup>29</sup> Ib. 163.

yet he ought to limit his desires to what falls to his lot, and comes within his reach, utterly indifferent to all external circumstances; and, like a good actor, be able to perform the part of Thersites as skilfully as that of Agamemnon.<sup>30</sup> All these principles do but bring prominently forward that element of cynicism which was somewhat more latently contained in the doctrine of Zeno. The same is traceable in his contempt for all scientific knowledge which is not immediately referrible to the morality of life; in the simplicity of his moral precepts, which were based on a confidence of firmness of character in the sage;<sup>31</sup> and lastly, in the utter indifference to outward appearance with which he proclaimed a perfect freedom of habits and manners; and while he demanded only that the sage should be ever occupied, cared in nowise what might be the object of his labours. To this cynical tendency of his doctrine, may perhaps be attributed the circumstance of his opening his school in the Cynosarges.<sup>32</sup> As to the doctrine of Herillus, not-

<sup>30</sup> Cic. de Fin. ii. 13; iv. 16, 17, 25; Acad. ii. 42; de Leg. i. 21; Sext. Emp. adv. Math. xi. 64; Diog. Laert. vii. 160; Plut. adv. Stoic. 27.

<sup>31</sup> He assumed a single virtue only, the health of the soul. Plut. de Virt. Mor. 2; de Stoic. Rep. 7; Diog. Laert. vii. 161. This, however, is inconsistent with other statements, which make him to have admitted a virtue in the science of good and evil. Galen. de Hipp. et Plat. Plac. v. p. 168; vii. p. 208 Chart. Nevertheless, both statements are possibly correct.

<sup>32</sup> Diog. Laert. l. l. Tennemann, in the above work, wholly misinterprets the doctrine of Aristo, when he calls it a practical science for mankind, or a science of life. The anecdote which is given in Plut. Phil. esse c. Princ. 1, proves nothing, and appears rather to refer to the meanness of his associates. He is also, apparently, in error, when, p. 222, he refers the passage from Porphyry, ap. Stob. Ecl. i. p. 826, to Aristo the Stoic. That Aristo should, in his later years, have abandoned himself to pleasure and enjoyment, as stated by his disciple Eratosthenes, ap. Athen. vii. 14. p. 281, proves nothing against the cynical character of his theoretical opinions.

withstanding that our information concerning it is far from circumstantial, we know enough of it to perceive how directly it was opposed to that of Aristo. In this light it was regarded by Cicero, who objects to Herillus that he as greatly enhances the importance of outward advantages as Aristo depreciates them. Nevertheless, Herillus did not make the supreme good to consist merely of external advantages; so little, indeed, was this the case, that it has been said of him that he posited, as it were, two supreme goods.<sup>33</sup> This remark originated in the distinction which he drew between the end of the sage and the end of the many, who strive only to attain the outward good things of life. But that he was far from wishing even the sage to neglect this end of exertion, appears as well from the words of Cicero as from the name of subordinate end (*ὑποτελής*), which he gave to it.<sup>34</sup> This does not constitute any material deviation from the pure doctrines of the Stoics: Herillus merely considers practical life, which is occupied about external things, as simply necessary, and denies it to be beautiful, on the ground that it does not contribute aught to the supreme good. For, limiting the virtue of the sage to science and knowledge, he appears to have wished to confine the morality of life to contemplation and theory.<sup>35</sup> In this re-

<sup>33</sup> Cic. de Fin. iv. 15. Sin ea (sc. quæ extra virtutem sunt) non negligimus, neque tamen ad finem summi boni referimus, non multum ab Herilli levitate aberrabimus. — facit enim ille duo sejuncta ultima bonorum.

<sup>34</sup> Diog. Laert. vii. 165; cf. Suid. s. v. *τέλος*. It is probably in reference to this subordinate end of exertion, that Diogenes, ib., makes him teach that there is no absolute supreme end, but that it varies according to circumstances. As to the *ὑποτελής*, or *ὑποτελής*, compare Stob. Ecl. ii. p. 60.

<sup>35</sup> Cic. de Fin. iv. 14. ut — ipsius animi, ut fecit Herillus, cognitionem am-



spect, the doctrine of Herillus is the direct opposite of that of Aristo, and gives greater prominence to that element of the Stoical system which, in all probability, was derived from the Megarian and Academical schools; and his exclusive cultivation of it may account for his rejection of many of the tenets of Zeno.<sup>36</sup>

As these instances clearly prove that the Stoical doctrine had not received a decided character and a fixed development from the hand of Zeno, it may be considered as a fortunate event for the school that it passed directly from Zeno under the direction of Cleanthes, who was not, indeed, endowed with any remarkable sagacity to complete and rectify the system of his master, but was, nevertheless, well qualified by the sternness and rigour of his character to purify it, and keep it free from all foreign admixture and corruptions. Cleanthes was a native of Assus of Troas; the date of his birth is unknown. He appears to have been of mean and poor parentage; for it is said that, originally, he gained a subsistence as a boxer, and that when he first came to Athens and studied philosophy under Zeno, all his wealth was four drachmas. His poverty has proved his glory: for he is said to have worked by night as a com-

plexarentur, actionem relinquerent. Ib. v. 25. Quum enim ab Aristotele et Theophrasto sæpe mirabiliter esset laudata per se ipsa rerum scientia, hoc uno captus Herillus scientiam summum bonum esse defendit. According to Diog. Laert. l. i.; Clem. Alex. Strom. ii. p. 416, the supreme end of Herillus appears somewhat differently, it being *κατ' ἐπιστήμην ζῆν*. But this is not essentially different from the doctrine of Zeno, and, moreover, very vague. Consequently, we prefer to follow the more precise statement of Cicero.

<sup>36</sup> Diog. Laert. vii. 165.

mon labourer, in order to be able to devote his days to study.<sup>37</sup> On account of his diligence in labour, which not only procured him a subsistence, but also the means of paying for the instruction of Zeno, (such being the practice of the Stoics,) Cleanthes has been called a second Hercules. He was equally diligent in the pursuits of science; for, being but poorly gifted by nature, he was slow to learn, but, even on that account, more retentive of whatever knowledge he had once acquired.<sup>38</sup> Accordingly, he appears to have adhered strictly to the views of his master, and to have preserved faithfully the spirit of his system; for the deviations which have been ascribed to him, will be found to concern chiefly the expression, or method of exposition; though, perhaps, in a few points, he may appear to have explained his master's views too literally, as frequently happens in the case of the disciples of eminent philosophers; and, in a few others, to have given too strict an acceptation to his moral precepts.<sup>39</sup> Cleanthes, like his master, is said to have voluntarily put an end to his existence.<sup>40</sup> From extant fragments of his works, it is seen that he composed not only in prose but also in verse; but as no purely poetical composition occurs in the catalogue of his works, it is probable that he combined poetry with prose, in conformity with the degenerate taste of his age, and with a practice but too common with the

<sup>37</sup> Diog. Laert. vii. 168.

<sup>38</sup> Ib. 37, 170, 171. Plut. de Recta Rat. Aud. 18.

<sup>39</sup> That Cleanthes was particularly strict in the moral theory, appears to follow from Diog. Laert. vii. 89, 127; Sext. Emp. adv. Math. xi. 73.

<sup>40</sup> Diog. Laert. vii. 176.

Stoics. A hymn of Cleanthes to Zeus is still extant, which has always won the admiration of those who love to trace Christian sentiments among the heathens, which, however, to be rightly understood, must be perused in the spirit of the Stoical philosophy.

Cleanthes had for his successor Chrysippus, who, according to the usual statement, was a native of Soli in Cilicia.<sup>41</sup> According to Apollodorus, his life falls between the 125th and 143rd Ol.<sup>42</sup> He is stated to have resembled the first leaders of the sect in having pursued a mean occupation previously to his pursuit of philosophy.<sup>43</sup> The statement that he heard Zeno himself is not absolutely impossible, but yet not very probable; that he was the disciple of Cleanthes is undoubted. He is also said to have studied the Academic philosophy, under Arcesilaus and Lacydes; of this fact, distinct vestiges may, it has been pretended, be traced in his writings.<sup>44</sup> For it is certain, that he must be regarded as the first of the Stoical philosophers, to set himself against the sceptical tendency of the

<sup>41</sup> Others give Tarsus as his birthplace, probably because his father was originally from thence. Strabo, xiv. 5, p. 225. As to Chrysippus, consult Baguet, *Fragmenta Chrysippi*, etc. in *Anal. Acad. Lovan.* 1821. There is also a short treatise by Osann, in his *Beitragen zur Griech. u. Röm Literaturgesch.* v. 1, p. 250 sqq.

<sup>42</sup> Diog. Laert. vii. 184; Suid. s. v. *Χρύσιππος*. This is not quite certain, since the length of his life is differently given. Still we must not with Baguet appeal to the authority of the Anonymus Auctor. in *Descriptione Olympiadum*, against the discordant statements of Valerius Maximus and Lucian de Longævis, 20; for, in spite of the objections to the contrary, which have been lately raised by Angelo Maio, this anonymous author may have been no other than Scaliger. Apollodorus makes Chrysippus attain the age of seventy-three, Lucian of eighty-one.

<sup>43</sup> Diog. Laert. vii. 179.

<sup>44</sup> Ib. 183, 184.

new Academy, and to oppose it with that fierceness of dialectic, with which it had attacked the Stoics; although he thereby furnished the later Academicians with fresh weapons of controversy.<sup>45</sup> On this ground he has been called the cutter of the academical knots. It appears that the sceptical questions of the Academy long kept the mind of Chrysippus in doubt as to the validity of the Stoical principles; at least we are told that, even in the lifetime of Cleanthes, he fell away from the profession of his master, but that, subsequently, his earlier opinions were confirmed.<sup>46</sup> By his mental character, Chrysippus was eminently fitted to become a disciple of philosophy. In the opinion of the ancients, he was remarkable for quickness of judgment, facility of apprehension, and great sagacity.<sup>47</sup> If any credit is due to the story which makes Chrysippus tell Cleanthes that he only wished to be instructed in the principles of the school, but that he himself would soon discover arguments to support them,<sup>48</sup> it would seem that, agreeing in general with the opinions of the earlier Stoics, he was far from satisfied with their method and reasoning. Such a view is further supported by the oft-repeated

<sup>45</sup> Plut. de Stoic. Rep. 2, 10; Cic. Ac. ii. 27.

<sup>46</sup> Diog. Laert. vii. 179. Diogenes, in his disorderly compilation, introduces much that is extraneous. I propose to connect *ἐν τῇ ζῶντος ἀπίσθη αὐτοῦ* — *μετενόησι μὲντοι*, and refer thereto the verses which are put in the mouth of Chrysippus. His work, *κατὰ τῆς συνηθείας*, appears to have been written quite in the spirit of the new Academy; his later work, *περὶ τῆς συνηθείας*, was considered even by the Stoics to be inferior to the earlier. Plut. de Stoic. Rep. 10; Cic. Ac. ii. 27. Perhaps it is this period of dissension from Cleanthes that is intended by the account that Chrysippus held school in the open air in the Lyceum. Diog. Laert. vii. 185.

<sup>47</sup> Diog. Laert. vii. 179; Cic. de Nat. D. iii. 10; Senec. de Benef. i. 3.

<sup>48</sup> Diog. Laert. i. 1.

statement, that Chrysippus differed in many points from Cleanthes and Zeno;<sup>49</sup> by his being regarded as the chief prop of this school, in which respect, it has been said of him that, without a Chrysippus, there would never have been a Porch.<sup>50</sup> At all events, as Chrysippus was an object of the greatest veneration and irrefragable authority with the later Stoics, he ought to be considered as the principal founder of the school, notwithstanding that, from the previous statements concerning him, his merits consist rather in the successful refutation of its adversaries, than in the creation of any new or original doctrine. The chief objects of his attack were the Epicureans and the Academy; but he also sought to refute the tenets of Plato and Aristotle and their followers; although he expressed the greatest esteem for those philosophers themselves, as well as for Socrates and the Cynics.<sup>51</sup> He also applied with diligence to the solution of certain sophistical disputations, which seem to have passed by inheritance from the Megarians to the Stoics. All branches of science, he zealously cultivated, without confining himself to those researches and speculations with which philosophy is immediately concerned; but, eager for information of every kind, he scarcely neglected any department of inquiry, except, perhaps, the more special studies of mathematics and natural history, which

<sup>49</sup> L. l.; Cic. Ac. ii. 47. The work of the Stoic Antipater, *περὶ τῆς Κλεάνθου καὶ Χρυσίππου διαφορᾶς*, even though it may have referred principally to the early differences between Cleanthes and Chrysippus, would necessarily mention the subsequent discrepancies of their doctrines. Plut. de Stoic. Rep. 4.

<sup>50</sup> Cic. Ac. ii. 24; Diog. Laert. vii. 183.

<sup>51</sup> Plut. de Stoic. Rep. 24.

were little cultivated by the Stoics generally.<sup>52</sup> His philosophical treatises, and the results of his diversified inquiries, were so voluminous that his works, which were more numerous than those of any other writer of antiquity,<sup>53</sup> are said to have amounted to seven hundred and five. Indeed, he appears to have had a passion for writing ;<sup>54</sup> and the rapid fertility of his genius seems to have seduced him into a style of writing which bespeaks neither previous reflection, nor care in the composition. It is well known that the first Stoics cared little, either for grace or beauty of style, but, in this respect, Chrysippus seems to have gone far beyond any of the others. The objections to Chrysippus, of obscurity, contradictions,<sup>55</sup> too great nicety of distinctions, and extreme subtlety, are to my mind of no account ; since these are the usual objections to all profound philosophers. If, moreover, he neg-

<sup>52</sup> Cic. Tusc. i. 45. Chrysippus — in omni Historia curiosus. Suid. s. v. Χρύσιππος. Diog. Laert. vii. 180 ; Athen. xiii. 18, p. 565. That the Stoics, in general, did not favour the study of mathematics and natural history, would follow from the praises bestowed upon Posidonius in distinction from the others of that sect. Galen. de Plac. Hipp. et Plat. iv. p. 143 ; viii. p. 226 ; Strab. ii. 3 fin. p. 164.

<sup>53</sup> Diog. Laert. vii. 180. In the catalogue of his works in Diogenes there is a considerable gap. Suid. ib. The hypothesis of Osann, in the work noticed above, that the treatise *περι κόσμου*, which stands among the Aristotelian works, is an exoterical work of Chrysippus, is to my mind not probable. Its author, whoever he was, undoubtedly has employed Stoical formulæ and ideas ; but what writer of later times does not ? To my mind, it is a treatise of the Pythagorean times.

<sup>54</sup> The story that he sought to rival Epicurus in composition falls to the ground when we consult chronology. Diog. Laert. x. 26.

<sup>55</sup> It is chiefly of the contradictions of Chrysippus that Plutarch's work, *de Stoicorum Repugnantiis*, treats. Some of these incongruities are certainly singular and important. The greater part of them, however, are chiefly verbal, and are looked upon as contradictory by Plutarch from ignorance of the Stoical doctrine, and I, consequently, shall but rarely pay regard to his objections.

lected all ornaments of style, and made use of obsolete terms and modes of expression, he only followed the practice of his school, while the mixture of verse and prose is excused by the false but prevailing taste of his time. On the other hand, he appears to be justly chargeable with vagueness, prolixity, and frequent repetitions, with the introduction of extraneous matters, and digressions from his subject; immoderately priding himself on the authorities of poets and historians, instead of proving by reason and argument; and thereby rendering his works almost unreadable for their length.<sup>56</sup> It is no justification of him, in this respect, that he himself should have confessed and ridiculed these faults of style;<sup>57</sup> it is a proof, rather, how much, even in the most distinguished members of the Porch, the descriptions of the self-sufficiency of the sage was calculated to lead to forgetfulness of the respect which is due to others. Nevertheless, we cannot but regret that not a single work of Chrysippus has come down to posterity; for, had it been otherwise, we should without doubt, have been able to form a more exact and correct view of Stoical philosophy, than we are enabled to do by his fragments, notwithstanding that they are, happily, much more considerable than those of the first two members of the school.

Chrysippus closes the list of those who co-operated in founding the Porch. His successors, undoubtedly, were not without authority with the

<sup>56</sup> For the series of testimonies to this point, consult Baguet, p. 26 and 125.

<sup>57</sup> Diog. Laert. vii. 180, which passage, however, is suspicious; Galen. de Hipp. et Plat. Plac. iii. p. 127.

later Stoics; but they begin, from the very first, to depart sensibly from the pure doctrine of the sect ; and, unless we are greatly mistaken, we discover in their tenets traces of a direction which gradually corrupted the true spirit of the ancient philosophy of the Porch. We shall, therefore, refer to a subsequent period the consideration of their opinions.



## CHAPTER II.

### OPINIONS OF THE EARLIER STOICS AS TO PHILOSOPHY AND ITS PARTS.

AFTER that men had long occupied themselves in vain with such artificial and complicated systems of philosophy, as those of Plato and of Aristotle especially, a suspicion began to arise that, from their very complication and refined distinctions, they had missed the simple point of solution ; and even the most diligent inquirers were persuaded that it was necessary to return to a simpler and more natural method. In this spirit was the Stoical system conceived. It marches straightforward, without much deliberation, to resolve the most important questions that have ever engaged and agitated the human mind. And although it occasionally involves itself in many learned and subtle speculations, these, nevertheless, do not constitute the essence of, but a simple accessory to, the doctrine. Accordingly, it evinces a marked horror for all those doctrines which are opposed to the more ordinary view of human life. Its characteristic principle is, that whoever attempts to control the sound common sense which forms the guiding principle of practical life, pronounces thereby his own condemnation. The Stoics, accordingly, appealed, in recommendation of their philosophy, to

its concurrence with the common notions and the generally prevailing views of human life.<sup>1</sup>

Philosophy, consequently, was in their view intimately connected with the duties of practical life. (Thus Chrysippus warmly combatted the opinion of Aristotle, that a life of solitude and contemplation is best suited to the sage; and he maintained, if we were strictly to analyse such a precept, we should find that it amounted to nothing less than a covert recommendation of selfish enjoyment.<sup>2</sup> The opposite of a life of pleasure is one of real activity or virtue; and with the Stoics, accordingly, philosophy is the practice of virtue; of which they said that, in a higher sense, it is the only useful art. The wisdom, which it is the object of philosophy to attain to, is virtue; and philosophy must, therefore, be considered partly as a practice, and partly as a pursuit of virtue; for these two are inseparable. But in all these definitions, the notion of virtue is understood in its widest acceptation, and, understood in this sense, it is not opposed to science. Thus we here meet again, in the Stoical doctrine, with that fundamental principle of all the Socratical schools, that virtue and true science are intimately allied to each other; it was on this ground, that they called wisdom the science of divine and human things, and philosophy, as the pursuit of wisdom, was, to their minds, the pursuit at once of virtue and of science.<sup>3</sup>

<sup>1</sup> The whole treatise of Plutarch, *περί τῶν κοινῶν ἔννοιῶν πρὸς τοὺς Στωϊκοὺς*, is intended to show that the Stoics falsely pretended to agree with common and general opinions. Galen. de Hipp. et Plat. Plac. iii. p. 113.

<sup>2</sup> Plut. de Stoic. Rep. 2.

<sup>3</sup> Plut. de Plac. Ph. Procem. οἱ μὲν οὖν Στωϊκοὶ ἔφασαν τὴν μὲν σοφίαν

This Stoical doctrine of the unity of virtue and science, is strongly indicated by their division of virtue, in reference to philosophy, into physical, ethical, and logical.<sup>4</sup> From this it clearly follows that they adopted the well-known division of philosophy into physics, ethics, and logic. But while they made this division, the Stoics maintained, in the most decided manner possible, that the parts of philosophy constitute an indivisible whole, and that they, as it were, by nature, grow out of each other. Of this they attempted a variety of illustrations, of which the most significant are derived from the composition of an organic whole.<sup>5</sup> For instance, they compared philosophy with an egg, of which the shell corresponds to logic, the white to ethics, and the yoke to physics; or to an animal, in which the bone and nerve resemble logic, the flesh corresponds to ethics, and the soul to physics.<sup>6</sup>

*εἶναι θείων τε καὶ ἀνθρωπίνων ἐπιστήμην τὴν δὲ φιλοσοφίαν ἀσκήσιν τέχνης ἐπιτηδεῖον· ἐπιτηδεῖον δ' εἶναι μίαν καὶ ἀνωτάτω τὴν ἀρετὴν.* Senec. Ep. 89. *Sapientia perfectum bonum est mentis humanæ, philosophia sapientiæ amor et affectatio.* — *Philosophia studium virtutis est, sed per ipsam virtutem; nec virtus autem esse sine studio sui potest, nec virtutis studium sine ipsa.*

<sup>4</sup> Plut. l. l. *ἀρετὰς δὲ τὰς γενικωτάτας τρεῖς, φυσικὴν, ἠθικὴν, λογικὴν.* Cic. de Fin. iii. 21, 22.

<sup>5</sup> This is the remark of Posidonius, ap. Sext. Emp. vii. 19.

<sup>6</sup> Diog. Laert. vii. 40. *εἰκάζουσι δὲ ζῶν τὴν φιλοσοφίαν ὅσοις μὲν καὶ νεύροις τὸ λογικὸν προσομοιοῦντες, τοῖς δὲ σαρκώδεσι τὸ ἠθικόν, τῇ δὲ ψυχῇ τὸ φυσικόν· ἢ πάλιν ὥψ· τὰ μὲν γὰρ ἐκτὸς εἶναι τὸ λογικόν, τὰ δὲ μετὰ ταῦτα τὸ ἠθικόν, τὰ δὲ ἐσωτάτω τὸ φυσικόν· ἢ ἀγρῷ παμφόρῳ, οὗ τὸν μὲν περιβεβλημένον φραγμὸν εἶναι τὸ λογικόν, τὸν δὲ καρπὸν τὸ ἠθικόν, τὴν δὲ γῆν ἢ τὰ δένδρα τὸ φυσικόν.* Different is the opinion of Posidonius, ap. Sext. Emp. adv. Math. vii. 17 sqq. A desire has been shown to correct Diogenes by Sextus. Tiedemann, System of Stoical Phil. i. p. 43; Bake, Posidonii Rhodii Reliquiæ Doctrinæ, p. 40. It is, however, probable that Posidonius differed herein from the older Stoics, as we shall hereafter see. In the order of the parts of philosophy, Sextus also follows the later Stoics. Ib. 22 c. not. Fabr.

But these comparisons serve not only to illustrate the intrinsic union into a whole of the several parts of philosophy, but also to point out their comparative importance in the Stoical system. What is most unquestionable is, that logic holds a very subordinate position relatively to the other two ; it represents, no doubt, the solid element of the living unity, the basis of its independent existence, and its protection and support against all external injuries ; nevertheless, as the shell only serves as a covering to the inward parts of the egg, and as the bones and nerves of the living body are merely for the use and service of the soul, so logic is regarded by them merely as the organum, or instrument of the other parts of philosophy.<sup>7</sup> This constitutes a material deviation from the view of such of the earlier Socratical schools, as were developed with any degree of completeness ; for Plato regarded the dialectic as the centre of his whole system, and Aristotle looked upon logical investigations, not only into the nature of science, but also into the general principles of human and natural powers and phenomena, as constituting the most elevated and most certain branch of knowledge. But in thus lowering the estimate of logic, the Stoics were but following in a course which the previous progress of philosophical investigation had prepared. For the opinion that logic is rather an organum of philosophy than philosophy itself, had been gradually gaining ground. It was openly avowed by the Epicureans ; and it was not altogether alien to the

<sup>7</sup> Cf. Sext. Emp. *ib.* 23 ; Phil. de Agric. 3. p. 302 Mang.

Peripatetics, and at a still earlier period we find it countenanced, in some degree, by Aristotle himself; for, by introducing erudition and experience into philosophy, he prepared the way for the adoption of an idea, that the object-matter of science must be furnished by observation from without, and that the sole end and purpose of logic is to give a scientific form to the collective results of experience. In this direction we find the Stoics proceeding so far as, with Epicurus, to degrade logic into the handmaiden, not merely of philosophy, but even of all sciences. For, however discrepant, in all other respects, the statements which have reached us concerning the Stoical division of logic may be, they agree in establishing this point; that the Stoics referred to this department of philosophy, not merely the investigations into ideas, propositions, and conclusions, but that they also treated therein of the sources and criteria of truth, and of the general laws of human thought, i. e. of the categories.<sup>8</sup> On the other hand, we find that they transferred the investigation into the grounds of things, God and matter, from logic to physics.<sup>9</sup> In this manner did they restrict the proper domain of logic, by removing from it its most important element.

Very different is the case as to the comparative value of ethics and physics; they could not well depreciate the claims of either, nor say that one existed solely for the sake of the other. Nevertheless, even here they admitted a certain sub-

<sup>8</sup> Diog. Laert. vii. 43, 49, 63; Senec. Ep. 89.

<sup>9</sup> Diog. Laert. vii. 136; Chrys. ap. Plut. de Stoic. Rep. 9.

ordination, and, from the previous illustrations, it is clear that they must have regarded physics as the highest philosophical science, to which ethics must conform itself just as the flesh obeys the soul; it is designed for the sake of physics in the same manner as the white of the egg serves for nourishment of the chick which proceeds from the yoke.<sup>10</sup> Against this view, however, the words of Chrysippus may, it is true, be urged, declaring that the sole end of physics is to prepare for the investigations into the nature of good and evil; but, on the other hand,<sup>11</sup> we meet with so many decided and direct testimonies of the earlier Stoics to the high and independent value of physics, that we cannot regard these words of Chrysippus in any other light than as an imperfect expression of his real opinion; for, by the Stoics, physics is called the most divine of philosophical sciences,<sup>12</sup> as having for its object the cognition of the divine, whereas ethics is said, agreeably to the prevailing view of the ancients, to be confined to the consideration of what is simply relative to man. When, now, we further remark, that the Stoics made the human to be entirely dependent upon the divine, and that Chrysippus represents theology as the most sublime object of philosophy,<sup>13</sup> we cannot longer doubt that physics,

<sup>10</sup> Sext. Emp. adv. Math. vii. 18.

<sup>11</sup> Plut. l. l.

<sup>12</sup> Sext. Emp. adv. Math. vii. 23. It is probably an echo of the earlier Stoical doctrine, and not in the spirit of his own views, when Seneca says, *Nat. Quæst. Præf.*, Quantum inter philosophiam interest — et cæteras artes, tantum interesse existimo in ipsa philosophia inter illam partem, quæ ad homines, et hanc, quæ ad deos spectat. — Tantum inter duas interest, quantum inter deum et hominem.

<sup>13</sup> Plut. l. l.

as leading to a knowledge of divine things, must have been looked upon by the Stoics as the most eminent part of philosophy. The later Stoics alone, Posidonius, for instance, appear to have given the preference to ethics over physics, influenced therein by a tendency of things which we have already frequently met with in the Socratical school, and which, moreover, is, in fact, of a general nature.

If, however, the earlier Stoics did not yield to the prevailing tendency of their age in this respect, they, nevertheless, gave in to it most decidedly in another, and which dates its origin from Aristotle. When, namely, we proceed to examine their subdivisions of logic, physics, and ethics, we find that they introduced into philosophy a variety of speculations which are, at most, but very remotely connected with it. This is most distinctly seen in their logic. This science, stripped, on the one hand, of the most important portion of its inquiries, was, on the other hand, richly compensated, if we look merely to the number and comprehensiveness of the topics which were transferred to it from elsewhere. In such a procedure, Aristotle had already set an example, by extending the domain of logic to the examination of dialectical and sophistical syllogisms. He was imitated in this by the Stoics, who appear to have paid more than ordinary attention to the analysis of fallacies; Chrysippus, in particular, is reproached for rivalling even the Megarians in this respect;<sup>14</sup> and the number of his treatises on the several kinds of sophism appears

<sup>14</sup> Plut. de Stoic. Rep. 10.

to justify the reproach.<sup>15</sup> The introduction of grammatical speculations constituted another considerable enlargement of logic. This may be considered as a natural consequence of the method both of Plato and Aristotle, who opened the evolution of their logical doctrine with a comparison of the forms of language and thought. The Stoics, however, have carried these speculations far beyond what was requisite for logical purposes. It is well known that they were the founders of grammar, such as it has reached us through the Latins. They were also the inventors of the technical terms of grammar for the designation of all the parts of speech and their variations, most of which may perhaps be ascribed to Chrysippus; who, moreover, was the author of several treatises on the derivation and primary meaning of words.<sup>16</sup> But if the Stoics herein did but follow the example of the earlier Socraticists, it was the peculiar merit or blame of the Stoics, that they enlarged the domain of logic by the accession of rhetoric, for which, perhaps, rhetoric was indebted to its close connection with grammar. Aristotle, it is true, had, in some measure, connected it with rhetoric; but, as he clearly saw that its form could not be treated of independently of its matter, he placed it in equally close connection with ethics; and, even if Plato

<sup>15</sup> For the numerous quotations see Baguet, §. lvi.—lxxii.

<sup>16</sup> Hereto belong among other of his works, the *περί τῶν πέντε πτώσεων, περί λήξεων, περί τῶν στοιχείων τοῦ λόγου καὶ τῶν λεγομένων, περί τῆς συντάξεως τῶν λεγομένων*. Diog. Laert. vii. 192, 193. The treatise *περί τῶν ἑτυμολογικῶν* is frequently quoted. See Baguet, §. xcvi. Compare also Herm. Schmidt *doctrinæ temporum verbi Græci et Latini expositio historica*. Viteberg. 1836, p. 11 sqq.



was inclined to reduce it to dialectic, it is clear that it was by taking the latter term in its widest signification. The Stoics, on the contrary, treated it as a principal part of logic, which they divided, from a purely external consideration, into dialectic and rhetoric.<sup>17</sup> In this division, poetry, and even music, obtained a place among the speculations on grammar.<sup>18</sup> It must be clear to all from this, that the Stoics were far from maintaining the idea of logic in its rigour; which, indeed, might otherwise be safely inferred, from their admitting into logic a part of philosophy, which is not occupied with principles and causes. But in the other parts, likewise, of their philosophy, we discover a similar blending of the philosophical elements with an extraneous erudition. This is however the case least of all in physics, in which the Stoics were deficient in those treasures of experimental knowledge which distinguished the earlier Peripatetics, on which, however, the Stoics looked down with a similar, if not as gross contempt, as the Epicureans.<sup>19</sup> Moreover, these branches of physical knowledge did not, perhaps, form a constituent of the education which the enlightened Greek of

<sup>17</sup> Cic. de Fin. ii. 6; Senec. Ep. 89; Diog. Laert. vii. 42, 47. This also is the basis of the division of Cleanthes. Ib. 41. Petersen, in his *Philosophiæ Chrysippi Fundamenta*, p. 25, thinks that Chrysippus did not treat of rhetoric as of a special division of philosophy, or that it was with him one and the same with the investigation into the criteria of truth; in neither of these views can I agree with him. According to Diog. Laert. vii. 55, compared with 49, it appears that the Stoics separated the doctrine of the criteria even from dialectic.

<sup>18</sup> Diog. Laert. vii. 44, 60.

<sup>19</sup> So Chrysippus, ap. Plut. de Stoic. Rep. 29. *περὶ τῶν ἐμπειρίας καὶ ἱστορίας διορίων διακελευσάμενος τὴν ἡσυχίαν ἔχειν, κ. τ. λ.*

this day demanded. What the Stoics particularly treated of, in this part of philosophy, was whatever is most sublime and divine ; and, under this aspect, we discover them attaching to philosophy a variety of foreign matters, entering at great length into the details of mythological research, and the various elements of pagan superstition. Lastly, they enriched their ethics by treatises upon duty and propriety ; but, while this was a point which undoubtedly had been too much neglected by preceding philosophers, the Stoics, on the other hand, carried their inquiries too far, and beyond the limits of a real philosophical progress. Their object would rather appear to have been, to give a complete body of useful and prudential precept and exhortation, than a scientific theory and classification of the duties of practical life, since they treat of all possible cases and circumstances, without ever attempting to determine the moral or immoral ground of such contingencies of duty. Hence the frequent recurrence of the question, what, in particular circumstances, the sage ought to do ; hence, too, their numerous exhortations on the most trifling points of duty, which, as Aristo justly said, are fitter for nurses and pedagogues, than philosophers. In short, we clearly see that the direction which Aristotle first gave to philosophy, has arrived at its greatest height in the Stoics, who transferred to the domain of philosophy much that properly belonged to the formal teaching of the school, without, however, being able to give to it a philosophical character. With this increase of the materials of science the true scientific spirit, which alone

could reduce them into unity by reducing them to a common philosophical point of view, had declined, and this mass of heterogeneous matters was only held together by the existing demand for a liberal and extensive scheme of education which the philosophical schools of this period laboured to meet.

This educational object was evidently not without its influence on the Stoics in determining the relations of the three parts of philosophy. Zeno and Chrysippus, it is true, still observed the original order of these parts, as it had been determined by the older Socratical schools;<sup>20</sup> but it is equally undeniable that even the earlier Stoics had shown signs of indecision on this head. But the later members of their school avowedly changed this order; some proposed to begin with ethics, which others, again, still placed second, while others, still later, regarded physics as the primary and initiatory part of philosophy: indeed, it would almost appear that even Cleanthes had made ethics to be intermediate between logic and physics.<sup>21</sup> Moreover, some of the Stoics were of opinion that these sciences need not be treated as special parts of philosophy, but that, in teaching, they might be combined together.<sup>22</sup> Even although we may not, perhaps, believe that the character of the earlier Stoical doctrine was favourable to such disorder, or rather, confusion of the several parts of philosophy, we must still confess that Chrysippus him-

<sup>20</sup> Diog. Laert. vii. 40.

<sup>21</sup> Ib. 41.

<sup>22</sup> Ib. 40. *καὶ οὐθὲν μέρος τοῦ ἑτέρου προκεκρίσθαι (ἢ ἀποκεκρίσθαι), καθὰ τινες αὐτῶν φασίν, ἀλλὰ μεμίχθαι αὐτά· καὶ τὴν παράδοσιν μικτὴν ἵπποιον.*

self, in his communication of philosophy, does not appear to have observed as strict a method and order as scientific precision demands. For he has been censured as having, at one time, taught that it was impossible to gain a right knowledge of moral questions without a previous acquaintance with physics and theology; but as having, at another time, advanced the opinion that youth ought to be taught ethics after logic, and before physics and theology, which ought to be last taught, as constituting the highest and most difficult problems of philosophy.<sup>23</sup> Now, although an attempt may be made to parry this objection, by drawing a distinction between a rigorous grounding in philosophy, which may require the former method, and the first initiation of young and inexperienced minds in philosophical speculation, for which the latter order of study may be more appropriate; <sup>24</sup> it is, nevertheless, clear, from this fact, that Chrysippus wished to discover some easier road to philosophy than that of the strict enchainment of theory; and it is not improbable that he was seduced into making this attempt by the necessity of teaching philosophy, however superficially, as a part of the general enlightenment. At all events, we cannot otherwise explain this procedure on the part of Chrysippus, which, moreover, can only be justified by the supposition that the character of the age rendered it expedient to abate a little of the rigour of method in instruction, and to oppose to the growing cor-

<sup>23</sup> Plut. de Stoic. Rep. 9; cf. Sext. Emp. adv. Math. vii. 23.

<sup>24</sup> This explanation is adopted by Tiedemann, *ib.* p. 14 sq. who is followed therein by many others.

ruption of morals, and the fatal facility of the Epicurean and similar systems, an equally attractive and easy theory of virtue, which, as appealing immediately to the moral convictions of man, might dispense with much of the rigour of science.

We are unable to say much concerning the method of the Stoics, in the absence of any ancient work which might enable us to form an idea of it. From the quotations, however, of their works by later writers, which unfortunately are for the most part very confused, they appear to have combined the Platonic method of division with the syllogism of Aristotle. But the latter, most probably, predominated in all their more special investigations, as may be inferred from their logic, and from their diligent examination of all the forms of arguments. Of Zeno we are told that, far from having the oratorical manner of his later followers, he was extremely terse and brief in his reasoning.<sup>25</sup> But the manner of Chrysippus, as has already been shown, was very different; who, after the manner of Aristotle, and the later Academy, discusses, at length, the arguments both for and against any position, in order to arrive at the truth by a careful appreciation of the conflicting grounds.<sup>26</sup> But Chrysippus deviated still more from the conciseness and brevity of Zeno, by his practice of accumulating authorities, in favour of his own views, drawn from the poets, from etymology, and all other extraneous sources. This capricious corruption of

<sup>25</sup> Cic. de Nat. D. ii. 7.

<sup>26</sup> This treatise, for and against the natural presentation of things, has been already mentioned; see Baguet, §. lxx; Plut. de Stoic. Rep. 10.

the pure style of philosophical exposition, which is not excused by any tendency to artistic excellence, was attended by equal caprice in their divisions. On this head, they advanced a theory which admitted a great variety, without attempting to determine the only correct and truly philosophical division;<sup>27</sup> and this may perhaps account for the number of discrepant divisions ascribed to their school. Our information on this head relates principally to those of logic, physics, and ethics. The Stoics had good reason to increase considerably the number of these divisions, since they mixed up so many extraneous matters with their philosophical investigations, as to render it impossible to develop, fully and freely, any philosophical idea, and to oblige them, consequently, to break it up into a variety of distinct and special chapters. Consequently, it was impossible for them to adopt a division strictly philosophical, and founded on the nature of the things; and, with a view to something like the appearance of order, they were constrained to be content with a collateral arrangement of the several topics of their investigations. The natural consequence was, a variety of opinions as to the best and most expedient order, and one arrangement was here preferred, while there another was adopted. In our exposition of the Stoical system, we shall pay little attention to these divisions, because our object is to give a view of their philosophy to the exclusion of all foreign matter; and because, also, there exists such confusion in the statements concerning them, that it would be in

<sup>27</sup> Diog. Laert. vii. 61.

vain to hope to extract order from them.<sup>28</sup> We shall only observe further on this point, that the repeated attempts of the Stoics to give a better co-ordination to their doctrines, by the adoption of different divisions, evinces at least an endeavour to give greater solidity and coherence to the loose and tottering structure of their system. The same desire is testified in the different and occasionally important modifications which they proposed in their definitions and formularies, by which they sought to give greater validity to their arguments and conclusions. But of these matters also we shall have occasion to notice but little; for it is evident that these changes affected nothing more than the outward form of their doctrine, and all that they bespeak is the weak hope of their age, that it might be possible to detain the fast-departing spirit of free inquiry, by the means of dead formularies transmitted in the learning of the schools.

<sup>28</sup> For these divisions consult Diog. Laert. vii. 41 sq.; 84, 132 sq. Petersen, in the work cited above, has laboured greatly to explain and reconcile them, but without much success.

## CHAPTER III.

### THE LOGIC OF THE EARLIER STOICS.

OF the various matters which the Stoics comprised under the head of logic, it must be clear from our previous remarks, that we are concerned with a very small part. This consists of two sections, of which one treats of the criteria and cognition of truth, the other of the categories. But even these two sections contain much which, to our view, belongs rather to universal grammar.

The theory of the sources of human knowledge took, after Aristotle, a new direction, of which we may regard, as the extremes of two divergent directions, the Epicureans and the Stoics on the one hand, and the Sceptics and the new Academy on the other. Aristotle had taken in hand the defence of the sensible element of thought, and in opposition to Plato endeavoured to show that in order to attain to science we must set out from the sensible, as the known, without, however, pretending to deny that the perfection of human cogitation, the rational thought, is really distinct from the motions of the soul, which are occasioned by sensation. The Stoics, on the contrary, agreeing herein with Epicurus, and following a tendency of which we have already discovered traces in the Platonists and Aristotelians, sought to approximate as closely as possible the rational thought to the sensuous per-



ception, and to explain the former as simply a result of the latter. In such an attempt they naturally fell in with many difficulties, and the means they had recourse to in order to get rid of these, compose the doctrine which is usually called the theory of the criteria of truth.

Now it is a singular and a distinctive trait in the character of the age of which we are treating, that neither Epicurus and his school, for whose superficial mode of scientific investigations we must be prepared to make much allowance, nor even the Stoics, who were both zealous and diligent in research, should scarcely have attempted to refute the Platonic doctrine of the reminiscence of the ideas, and the active intellect of Aristotle, with a view to clear the way for the reception of their own theories. It would appear that these doctrines were considered as obsolete; and they may perhaps have been considered as groundless assumptions, which only lived in the memory of history. Moreover, the little interest that attached to the question, how an idea can fully represent its object, may perhaps also have had its source in the superficial carelessness of the age. To get rid of the doubts that arose on this head, it was thought sufficient to assume merely a certain degree of resemblance between thought and its object, as it were, a picture of the object in the soul, without venturing to examine more closely its nature and cause. Accordingly, in the same proportion that the objective of thought was more and more lost sight of, the more would the attention of those who sought to establish a particular theory concerning

the essence of things, be confined to investigating the different representations in the human mind. With such an object in view, it was of course of importance to refute the opinions of the Sceptics, and to show that man is able to distinguish a true from a false representation, without, however, going beyond the sphere of the sensuous presentation itself, or attempting to demonstrate the exact agreement between the representation and its object.

These general remarks must have made it easy to divine the character of the Stoical disquisitions upon the criterion of truth. Setting out with the supposition of the permanence of ideas in the mind, they proceeded to illustrate their successive development in passing from the particular into the general; and, lastly, they determined the degree of their verity and their difference from the unreal creations of the imagination.<sup>1</sup> This theory, on the whole, is extremely simple and perspicuous; the Stoics, however, have sadly spun it out by interweaving into it a variety of learned speculations, by adopting a technical phraseology more remarkable for its scrupulous nicety than the precision of its distinctions. By conception (*φαντασία*) they comprised whatever is found in the soul considered as the consciousness, for they classed under this head not merely the consciousness of the rational mind, but also that of the brutes; not merely the sensuous representation, but also the notion of the non-sensible; not merely the representations ex-

<sup>1</sup> Diog. Laert. vii. 42. τὸ μὲν οὖν περὶ κανόνων καὶ κριτηρίων παραλαμβάνουσι πρὸς τὸ τὴν ἀλήθειαν εὐρεῖν· ἐν αὐτῷ γὰρ τὰς τῶν φαντασιῶν διαφορὰς ἀπειθύνουσι.

cited by an object actually present, but also that which has the semblance of being caused by a present object.<sup>2</sup> Something capable of being represented (*φανταστών*) corresponds to the representation, which must be conceived of as a passive affection of the soul (*πάθος*), and supposes some active object to produce it in the soul; this active cause is an external object, which, by means of the senses, produces a sensation in the soul.<sup>3</sup> Connected with this explanation is the view that the soul is originally a blank tablet, (*rasa tabula*), prepared to receive any writing; in this manner, all our thoughts are written in our souls, in the first instance, by sensation, whence memory results; while, from a number of analogous sensations, experience is formed.<sup>4</sup> This method of explaining thought had been previously adopted by Aristotle; but it was carried out much further by the Stoics, for they attempted to derive from sensation and sensuous

<sup>2</sup> Ib. 46, 51. εἰσὶ δὲ τῶν φαντασιῶν καὶ ἐμφάσεις αἱ ὥσανεὶ ἀπὸ ὑπαρχόντων γινόμεναι. This is apparently opposed by the distinction between *φαντασία* and *φάντασμα*, of which hereafter; properly, however, this distinction refers only to *φαντασία καταληπτική*, and it is clear that the notion of *φαντασία* was employed in a very general sense by the Stoics, and consequently comprising *φάντασμα*. Thus the *ἐννόημα* is also called a *φάντασμα*, Diog. Laert. vii. 61; Plut. de Pl. Ph. iv. 11, but according to the above it is also a *φαντασία*.

<sup>3</sup> Plut. de Pl. Ph. iv. 12. According to Chrysippus. *φαντασία μὲν οὖν ἐστὶ πάθος ἐν τῇ ψυχῇ γινόμενον, ἰνδεικνύμενον ἐν αὐτῇ καὶ τὸ πεποιηκός.* — *φανταστών δὲ τὸ ποιοῦν τὴν φαντασίαν, ὡς τὸ λευκὸν καὶ τὸ ψυχρόν· καὶ πᾶν, ὃ τι ἂν δύνηται κινεῖν τὴν ψυχὴν, τοῦτ' ἐστὶ φανταστών.*

<sup>4</sup> Ib. c. 11. οἱ Στωικοὶ φασιν· ὅταν γεννηθῇ ὁ ἄνθρωπος, ἔχει τὸ ἡγεμονικὸν μέρος τῆς ψυχῆς, ὥσπερ χαρτίον ἐνεργον εἰς ἀπογραφὴν· εἰς τοῦτο μίαν ἐκάστην τῶν ἐννοιῶν ἐναπογράφεισθαι. πρῶτος δὲ ὁ τῆς ἀπογραφῆς τρόπος ὁ διὰ τῶν αἰσθήσεων. αἰσθανόμενοι γὰρ τινος ὡς λευκοῦ ἀπελθόντος αὐτοῦ μνήμην ἔχουσιν, ὅταν δὲ ὁμοειδῆς πολλαὶ μνημαὶ γίνωνται, τότε φασιν ἔχειν ἱμπερίαν.

representations not merely all knowledge of phenomena, but also intellectual thought itself. This is deducible from a variety of determinations of their doctrine, none of which in truth affords, singly, certain and complete evidence of this tendency, but nevertheless, as they all favour more or less this conclusion, leave collectively not the slightest doubt upon the point. Two matters especially deserve notice in this respect: the idea which the Stoics formed of science itself, and that which they made to be the object of rational cognition. These points will well repay a searching examination.

Of their idea of science we meet with a variety of definitions, which, more or less deficient in precision, are nevertheless ultimately identical.<sup>5</sup> They employed this idea both in a wider and in a narrower acceptation; in the former sense it indicates a firm conviction, incapable of being disturbed by any argument (λόγος), while in the latter it stands for any system of such convictions. When, now, we proceed to inquire in what way this firm scientific conviction is to be acquired, we discover a guide to the solution of this question in the position which is appended to some of the definitions of the Stoics, according to which science consists

<sup>5</sup> Stob. Ecl. ii. p. 128. εἶναι δὲ τὴν ἐπιστήμην κατάληψιν ἀσφαλῆ καὶ ἀμετάπτωτον ὑπὸ λόγου· ἐτέραν δὲ ἐπιστήμην σύστημα ἐξ ἐπιστημῶν τοιούτων, οἷον ἡ τῶν κατὰ μέρος λογικῇ ἐν τῷ σπουδαίῳ ὑπάρχουσα· ἄλλην δὲ σύστημα ἐξ ἐπιστημῶν τεχνικῶν ἐξ αὐτοῦ ἔχον τὸ βέβαιον, ὡς ἔχουσιν αἱ ἀρεταί· ἄλλην δὲ ἔξιν φαντασιῶν δικτικὴν ἀμετάπτωτον ὑπὸ λόγου, ἣν τινὰ φασιν ἐν τόνῳ καὶ δυνάμει κίεσθαι. Diog. Laert. vii. 47. αὐτὴν δὲ τὴν ἐπιστήμην φασὶν ἢ κατάληψιν ἀσφαλῆ ἢ ἔξιν ἐν φαντασιῶν προσδόξῃ ἀμετάπτωτον ὑπὸ λόγου. Cf. Cic. Ac. i. 11.

in the possession of ideas. This view would favour the conclusion that science does not differ, as to its object-matter, from the sensuous presentation, and that it is only superior to it by the certainty of its possession of ideas. We are here reminded of Zeno's figurative explanation of science; comparing our representations to the extended fingers, he said, the contraction of the fingers illustrates the assent (*συγκατάθεσις*) which the mind gives to its representations, and that the formation of firm conviction (*κατάληψις*) is, as it were, the firm doubling of the fist; lastly, he explained that supreme conviction which science alone can furnish by the combination of several such firm convictions, by the right fist grasped and firmly compressed by the left hand.<sup>6</sup> This description of the advance from the simple representation to science, implies, it is true, an independent and spontaneous activity of the soul, which gives assent to the representations, and maintains and confirms them by conviction. This independent activity is clearly indicated in that definition of science which derives the firm possession of its ideas from the tension (*τόνος*) and energy of the soul; as also, in the general practice of the Stoics, of making the ruling portion of the soul—in other words, the reason—to be that which of itself produces representations, sentiments, and the mental assent.<sup>7</sup> The Stoics, therefore, were far from being disposed to look upon knowledge

<sup>6</sup> Cic. Ac. ii. 47.

<sup>7</sup> Plut. de Pl. Ph. iv. 21. οἱ Στωικοὶ φασιν εἶναι τῆς ψυχῆς ἀνώτατον μέρος τὸ ἡγεμονικόν, τὸ ποιοῦν τὰς φαντασίας καὶ τὰς συγκαταθέσεις καὶ αἰσθήσεις καὶ ὁρμὰς· καὶ τοῦτο λογισμὸν καλοῦσιν.

and science as mere effects of the impressions produced by external objects, for such a view would have been inconsistent with their maintaining, as they did, that science is a virtue of the soul ; nevertheless, agreeably to the general character of their doctrine, they contemplated theoretical, and, as we shall afterwards see, practical science also, from a physical point of view. In other words, the Stoics conceived the cognition of the soul, as well as sensation itself, to be a natural effect of the reciprocal action of outward objects and the inward faculties of the soul, in which as much depends on the quality of the external as on that of the internal. On this account, although they were of opinion that assent is entirely subjective, and subject to the will, they nevertheless admitted that sensuous impressions may, by their nature, constrain assent to themselves.<sup>8</sup> On this ground also Chrysippus taught, that the idea which is produced in the soul by an outward object is a passive affection of the soul, which reveals to us, however, its efficient cause, in the same manner that light serves to show not only itself but also the objects which it illumines ; and to this manifestation by the senses of outward objects, they attached immediately, and as a necessary consequence, the judgment that such objects exist really. When, for instance, we see whiteness, our soul is passive ; but from this passive state there immediately arises the conclu-

<sup>8</sup> Cic. Ac. i. 11. Sed ad hæc, quæ visa sunt et quasi accepta sensibus, assensionem adjungit (sc. Zeno) animorum, quam esse vult in nobis positam et voluntariam. Visis non omnibus adjungebat fidem, sed iis solum, quæ propriam quandam haberent declarationem earum rerum, quæ viderentur. Ib. ii. 12 ; de Fato, 18 ; Sext. Emp. adv. Math. viii. 397 sq.

sion that there must be some white object which excites our senses and the soul.<sup>9</sup> From this it must be clear that the Stoics were convinced that we received, through the senses, not merely the object-matter of all scientific knowledge, but that also the forms in which we think of phenomena, and their causes, are furnished from the same source; and that the activity of the soul in cognition, consists in nothing else than the greater or less force with which, while we reject all false representations or ideas, we adhere to the true, and, by combining one or more in causal connection, confirm our conviction of their verity.

Such a view, however, involved the difficulty of accounting for the possibility of distinguishing true from false representations. In the controversy with the Sceptics and the new Academy on this head, it was usual to set out with the assumption of the practical necessity of a certainty of knowledge; and, in this respect, the Stoics showed satisfactorily, that both desire and action would be impossible, if uncertainty were to prevail as to that which is the object of desire; and that, in particular, there cannot be any virtuous consistency of action in the absence of a firm conviction of the truth.<sup>10</sup> But their arguments only tended to de-

<sup>9</sup> Plut. de Pl. Ph. iv. 12. *φαντασία μὲν οὖν ἐστὶ πάθος ἐν τῇ ψυχῇ γινόμενον ἐνδεικνύμενον ἐν αὐτῇ καὶ τὸ πεποιηκός· οἷον ἐπειδὴν δι' ὀφθαλμοῦ θεωρῶμεν τὸ λευκόν, ἔστι πάθος τὸ ἐγγεγεννημένον διὰ τῆς ὁράσεως ἐν τῇ ψυχῇ· καὶ τοῦτο τὸ πάθος εἰπεῖν ἔχομεν, ὅτι ὑπόκειται λευκὸν κινεῖν ἡμᾶς. ὁμοίως καὶ διὰ τῆς ἀφῆς καὶ τῆς ὁσφρήσεως. εἴρηται δὲ φαντασία ἀπὸ τοῦ φωτός· καθάπερ γὰρ τὸ φῶς αὐτὸ δείκνυσιν καὶ τὰ ἄλλα τὰ ἐν αὐτῷ περιεχόμενα καὶ ἡ φαντασία δείκνυσιν αὐτήν καὶ τὸ πεποιηκός αὐτήν.*

<sup>10</sup> Cic. Ac. ii. 12. It is clear from its general spirit, that this passage was after some Stoical models.

monstrate the necessity of certainty, without attempting to point out the mode in which its attainment is possible. And these are precisely the difficulties which the Stoics were far worse qualified than either Plato or Aristotle to appreciate. It could not escape them that all representations do not gain our assent, since many appear to disagree with their object; how, then, are the false to be distinguished from the true, if there be no superior intellectual faculty to judge them, and all knowledge results from the sensuous presentation? The representations themselves must furnish the criterion of their own truth or falsity, if the truth of cognition is to be derived from them alone. Such appears to have been the opinion of the Stoics when they asserted that the true or conceivable representation (*φαντασία καταληπτική*) reveals not only itself, but its object likewise; it, they said, is nothing else than a representation, which is produced by a real object in a manner analogous to its nature.<sup>11</sup> This amounts in fact to making the distinctness of the sensuous impression the criterion of truth, and, in fact, this was the only explication of it possible to a theory which derived the knowledge of truth from sensation. Rightly to understand the Stoical doctrine of the origin of science, it is of importance to keep constantly in

<sup>11</sup> See Plut. de Pl. Ph. iv. 12; also Diog. Laert. vii. 46. τῆς δὲ φαντασίας τὴν μὲν καταληπτικὴν, τὴν δὲ ἀκατάληπτον. καταληπτικὴν μὲν, ὅτι κριτήριον εἶναι τῶν πραγμάτων φασί, τὴν γινομένην ἀπὸ ὑπάρχοντος κατ' αὐτὸ τὸ ὑπάρχον ἐναπείσφραγισμένην καὶ ἐναπομεμαγμένην ἀκατάληπτον δὲ τὴν μὴ ἀπὸ ὑπάρχοντος, ἢ ἀπὸ ὑπάρχοντος μὲν, μὴ κατ' αὐτὸ δὲ τὸ ὑπάρχον τὴν μήτραν ἔχουσαν μὴδὲ ἔκτυπον. Ib. 54. Cic. Ac. i. 11. Visis non omnibus adjungebat (sc. Zeno) fidem, sed iis solam, quæ propriam quandam haberent declarationem earum rerum, quæ viderentur.



mind that it invariably looked to two points: the outward exciting cause by which sensation is awakened, and the vital energy of the soul where-with it seizes and retains in itself the external impulsion, by which alone the sensuous perception becomes the true property of the soul and acquires its scientific certainty.

If, on the latter point, the Stoical doctrine appears defective, it was still less able to extricate itself from many other difficulties which are involved in the question, as to the agreement of the correct representation with its object. For the question was not merely to distinguish the real representation from the unreal phantoms of the imagination, but to show how it can express that which is in the object. The latter point the Stoics thought to get rid of simply enough by adopting the opinion, that the idea or representation is a copy of its object in the soul. This explanation Cleanthes took in its direct and proper sense, comparing the idea to the manner in which an impression on wax expresses in relief the die which is sunk in the seal; and to such a view of the matter the Stoical theory would appear naturally to lead, since it conceived of the essence of the soul in a purely physical light. But Chrysippus, in his controversy with the Sceptics, must have quickly discovered that such an explanation is not borne out by phenomena. Accordingly he remarked that, if the idea were such a copy in the soul of an outward object, it would be impossible that the same object should excite several impressions, and consequently give rise to several ideas in

the same subject. As to the extent to which he followed up this observation, our accounts are very incomplete and unsatisfactory; all that we clearly know is, that he founded it on the fact, that many ideas may be in the soul at the same time, just as in the air a variety of tones. On this account, he did not believe himself to be justified in giving any other explanation of a true idea than that it is a change of the soul by some outward object;<sup>12</sup> without attempting further to determine wherein lies its resemblance with its object.

The Stoics were equally unable to explain the fact that the observations of the uneducated, and those of men long practised in any matter, differ so materially in accuracy and certainty. They merely called attention to the necessity which Speusippus had previously insisted upon, of distinguishing between spontaneous and purely physical representations and ideas, and those which have been matured and corrected by study and experience; for, they observed, a picture is looked at with a different eye by the painter and the uninitiated in the art.<sup>13</sup> This distinction would naturally lead to an

<sup>12</sup> Sext. Emp. adv. Math. vii. 228 sqq. *φαντασία οὖν ἐστὶ κατ' αὐτοὺς τύπωσις ἐν ψυχῇ, περὶ ἧς εὐθὺς καὶ διέστησαν. Κλεάνθης μὲν γὰρ ἤκουσε τὴν τύπωσιν κατὰ εἰσοχὴν τε καὶ ἐξοχὴν, ὥσπερ καὶ διὰ τῶν δακτυλίων γινομένην τοῦ κηροῦ τύπωσιν. Χρύσιππος δὲ ἀτοπον ἡγεῖτο τὸ τοιοῦτον, κ. τ. λ. Ib. 372; viii. 400; Diog. Laert. vii. 45, 46, 50. *φαντασία δὲ ἐστὶ τῶν τύπων ἐν ψυχῇ τουτέστιν ἀλλοιώσις, ὡς ὁ Χρύσιππος ἐν τῇ δυοδεκάτῃ περὶ ψυχῆς ὑφίσταται. οὐδὲ γὰρ δεκτίον τὴν τύπωσιν οἰοῖ τύπον σφραγιστήρος, ἐπεὶ ἀνένδεκτόν ἐστι πολλοὺς τύπους κατὰ τὸ αὐτὸ περὶ τὸ αὐτὸ γίνεσθαι.**

<sup>13</sup> Diog. Laert. vii. 51. *καὶ αἱ μὲν (sc. φαντασίαι) εἰσι τεχνικαί, αἱ δὲ ἀτεχνοί. ἄλλως γοῦν θεωρεῖται ὑπὸ τεχνίτου εἰκὼν καὶ ἄλλως ὑπὸ ἀτίχνου. Plut. de Pl. Ph. iv. 11. τῶν ἰννοῶν αἱ μὲν φυσικῶς γίνονται κατὰ τοὺς εἰρημένους τρόπους καὶ ἀνεπιτεχνήτως· αἱ δ' ἤδη δι' ἡμετέρας διδα-*

attempt to distinguish what is originally given in the ordinary representation, and what we only subsequently become cognisant of by means of study and experience. The former the Stoics designated as the notion (*πρόληψις*), the latter as thought in a narrow sense (*ἐννοια*).<sup>14</sup> Now as the notion is closely connected with the conceivable representation, and as the scientific thought likewise leads to a knowledge of truth, it might be said that the criterion of truth is to be found indifferently in the representation or sensation, in the notion, and in the thought.<sup>15</sup> For the notion, or *prolepsis*, is, according to Chrysippus, a natural thought of the general;<sup>16</sup> and as it attaches itself in a natural manner to sensation, it must belong to the sensuous representation, and can be indicative of nothing else than a natural result of sensation in the soul. Here, however, it is necessary to observe that, by their attempt to resolve all knowledge into sensation and the resulting representations, the Stoics were driven to employ the idea of sensation and conceivable representation in a far wider sense than Plato and Aristotle. According to Plato, not only are particular phenomena and individual objects sensuously perceived, but the species or general forms of things also; and even good and evil, according to certain in-

σκαλίας καὶ ἐπιμελείας. αὗται μὲν οὖν ἐννοιαὶ καλοῦνται μόναι, ἐκεῖναι δὲ καὶ πρόληψις. So too in the definition of science. Stob. Ecl. ii. p. 128. σύστημα ἐξ ἐπιστημῶν τεχνικῶν.

<sup>14</sup> Plut. l. i.

<sup>15</sup> Diog. Laert. vii. 54. ὁ δὲ Χρύσιππος — κριτήριά φησιν εἶναι αἰσθῆσιν καὶ πρόληψιν. Suid. s. v. πρόληψις. ὁ δὲ Χρύσιππος ἐν τῷ ἑβ' τῶν φυσικῶν λόγων τρία φησὶν εἶναι κριτήρια, αἰσθῆσιν, γνῶσιν καὶ πρόληψιν.

<sup>16</sup> Diog. Laert. l. i. εἶστι δ' ἡ πρόληψις ἐννοια φυσικὴ τῶν καθόλου.

nate notions.<sup>17</sup> From this fact it must be clear, that the understanding, which Chrysippus made to be the source of reason or language, and that reason itself, which constitutes the difference between man and the brutes, could not be placed by them in anything else than the mode whereby man, in and with sensations, attains, by the means of memory and recollection, to an apprehension of the universal, and of good and evil.<sup>18</sup> But this spontaneous and natural cognition of truth requires to be carefully distinguished from that elaborate development of thought which leads to the formation of a system of sciences; although at the same time it must be admitted, that the latter is closely dependent on the former; on which account, the Stoics laboured greatly to prove that their own theory was in perfect accordance with the common and natural opinions of men. With this view, they attempted to show that all ideas which we do not arrive at immediately by impressions upon the senses, are mere transformations of sensuous representations. For, they said, all our ideas are acquired either by falling in with their objects, or else by passing from those so acquired to others, either by resemblance or analogy, by transposition

<sup>17</sup> Plut. de Stoic. Rep. 17. τὸν περὶ ἀγαθῶν καὶ κακῶν λόγον, ὃν αὐτὸς εἰσάγει (sc. Χρύσιππος) καὶ δοκιμάζει, συμφωνότατον εἶναι φησὶ τῷ βίῳ καὶ μάλιστα τῶν ἐμφύτων ἄπτεσθαι προλήψεων. Ib. 19. οὐ γὰρ μόνον τὰ (vulg. ὄντα) πάθη ἐστὶν αἰσθητὰ σὺν τοῖς εἶδεσιν, οἷον λύπη καὶ φόβος καὶ τὰ παραλήσια, ἀλλὰ καὶ κλοπῆς καὶ μοιχείας καὶ τῶν ὁμοίων ἐστὶν αἰσθίσθαι καὶ γὰρ ὅλον ἀφροσύνης καὶ δειλίας καὶ ἄλλων οὐκ ὀλίγων κακιῶν, κ.τ.λ. Diog. Laert. vii. 53. φυσικῶς δὲ νοεῖται, δίκαιόν τι (f. τε) καὶ ἀγαθόν.

<sup>18</sup> Plut. de Plac. Ph. vi. 11. ὁ δὲ λόγος, καθ' ὃν προσαγορεύεσθαι λογικοί, ἐκ τῶν προλήψεων συμπληροῦσθαι λέγεται κατὰ τὴν πρῶτην (διευτήραν ?) ἰβδομάδα.

or composition, and by opposition or privation.<sup>19</sup> These modes of transition evidently imply a certain art and scientific procedure in the development of ideas, which, however, is incapable of forming any others than those which, as yet unevolved, are originally contained in the common or natural representation. Their object was merely to explain how, setting out from particular sensations, it is possible to arrive, by means of memory and association, to experience, and a knowledge of the universal.<sup>20</sup>

As the Stoics, in imitation of Aristotle, sought to make reasoning (λόγος) the foundation of science,<sup>21</sup> they must naturally have regarded it as of importance to show how it is possible to arrive at a knowledge of the general truths on which all reasoning ultimately rests. Having resolved this point, satisfactorily as they thought, in the manner we have just described, they found themselves involved in the difficulty which had previously occurred to Aristotle, of demonstrating the truth of science, which treats of universals. Having ob-

<sup>19</sup> Not without confusion, but still the completest and best authority on this point, is the passage, Diog. Laert. vii. 52 sq. τῶν γὰρ νοουμένων τὰ μὲν κατὰ περίπτωσιν ἐνοήθη, τὰ δὲ καθ' ὁμοιότητα, τὰ δὲ κατ' ἀναλογίαν, τὰ δὲ κατὰ μετάθεσιν, τὰ δὲ κατὰ σύνθεσιν, τὰ δὲ κατ' ἐναντίωσιν. — νοεῖται δὲ κατὰ μετάβασιν τινα, ὡς τὰ λεκτά καὶ ὁ τόπος, — καὶ κατὰ στίρῃσιν, οἷον ἄχειρ. Cic. de Fin. iii. 10; cf. Sext. Emp. adv. Math. iii. 40. καθόλου δὲ πᾶν τὸ νοούμενον κατὰ δύο τοῦς πρώτους ἐκνοεῖται τρόπους· ἢ γὰρ κατὰ περίπτωσιν ἐναργῆ ἢ κατὰ τὴν ἀπὸ τῶν ἐναργῶν μετάβασιν καὶ ταύτην τρισσὴν· ἢ γὰρ ὁμοιωτικῶς ἢ ἐκσυνθετικῶς ἢ ἀναλογιστικῶς. Ib. ix. 393.

<sup>20</sup> Plut. de Pl. Ph. iv. 11. αἰσθανόμενοι γὰρ τινος οἷον λευκοῦ ἀπελθόντος αὐτοῦ μνήμην ἔχουσι, ὅταν δὲ ὁμοειδῆς πολλὰ μνημαὶ γίνωνται, τότε φαίνονται ἔχειν ἐμπειρίαν· ἐμπειρία γὰρ ἐστὶ τὸ τῶν ὁμοειδῶν πλήθος.

<sup>21</sup> Diog. Laert. vii. 83.

served the growing tendency of Greek philosophy to found truth upon sensation, and which is strongly apparent in the Stoical doctrine, we cannot feel surprised to find the Stoics arranging themselves on the side of Aristotle, in opposition to Plato, and refusing to recognise the universal as absolute, and as subsisting in and by itself.<sup>22</sup> But in this direction the Stoics went far beyond Aristotle; not only were they of opinion that general ideas are neither wholly false nor wholly true, since they do not express the individual character of particular objects which alone have truth and reality,<sup>23</sup> and that they do not stand for any individual object soever;<sup>24</sup> but the Stoics even maintained that the ideas exist only in our thought,<sup>25</sup> whereas Aristotle had conceded their truth, partly in the divine intellect, and partly in fashioned matter. This denial of the verity of general ideas must necessarily have exercised considerable influence on the Stoical view of science; the more especially, as with them the general was identical with the intellectually conceivable.<sup>26</sup> In fact, the conception which the Stoics formed of science would appear to have left to it little either

<sup>22</sup> Stob. Ecl. i. p. 332.

<sup>23</sup> Sext. Emp. adv. Math. vii. 246. οὔτε δὲ ἀληθεῖς οὔτε ψευδεῖς εἰσὶν αἱ γενικαί (sc. φαντασίαι). ὥν γὰρ τὰ εἶδη τοῖα ἢ τοῖα, τούτων τὰ γένη οὔτε τοῖα οὔτε τοῖα. Thus the species, with the Stoics, is properly the individual. Diog. Laert. vii. 61. εἰδικώτατον δὲ ἐστίν, ὃ εἶδος ὃν εἶδος οὐκ ἔχει, οἶον Σωκράτης.

<sup>24</sup> Simpl. in Cat. fol. 26 b. ed. Bas. οὔτινα τὰ κοινά. — ὁ γὰρ ἀνθρώπος οὔτις ἐστίν.

<sup>25</sup> Plut. de Pl. Ph. i. 10. οἱ ἀπὸ Ζήνωνος Στωικοὶ ἐννοήματα ἡμῖν τε τὰς ἰδέας ἔφασαν.

<sup>26</sup> This follows from the above-noticed doctrine of the νόημα or ἐννόημα. See also Diog. vii. 61; Joann. Damasc. Parall. Sacra in Append. Stob. Sermon. p. 432, ed. Gaisf. Χρύσιππος τὸ μὲν γενικὸν ἢ δὲ νοητὸν τὸ δὲ εἰδικὸν καὶ προσπίπτον ἤδη (f. ἡδὺ Petemen) αἰσθητόν.

of truth or reality; nevertheless, they zealously opposed all systems which appeared to be destructive to science, and they also attempted to show that man is able to acquire a knowledge of the truth, and that science is the greatest good of the soul. It is not impossible that they deceived themselves, for, in truth, their speculations were so ingenious and refined that they may have got involved in their own subtleties, by which indeed many were deceived into believing that they ascribed to science a more complete knowledge of the objective than was in fact the case with them. They distinguished two kinds of the true; the sensible and the intelligible; the former, however, is not immediately true, but only relatively to the intelligible which corresponds to it.<sup>27</sup> This view appears to ascribe to science, in the most express manner possible, the knowledge of the true. But the Stoics drew a distinction between the true and the truth, and we here meet with the surprising circumstance that, with them, truth is in essence a body, while the true is incorporeal. Now when we remember that, according to the Stoics, every true substance is corporeal, we cannot avoid drawing from the above, the conclusion that the true which they made to be the object of science, was in their opinion something without reality or substance. And this inference is borne out by fact, for they supposed that the true belongs only to propositions, and that propositions are merely

<sup>27</sup> Sext. Emp. adv. Math. viii. 10. οἱ δ' ἀπὸ τῆς στοᾶς λήγουσι μὲν τῶν αἰσθητῶν τινα καὶ τῶν νοητῶν ἀληθῆ· οὐκ ἐξ εὐθείας δὲ τὰ αἰσθητά, ἀλλὰ κατ' ἀναφορὰν τὴν ὡς ἐπὶ τὰ παρακείμενα τούτοις νοητά.

something that can be expressed (*λεκτόν*); but that which can merely be expressed they classed with vacuum, time, and space, among the incorporeal.<sup>38</sup> There could scarcely be a more direct avowal than this, that the distinction between the true and the false exists only in propositions. But the Stoics were ready with another distinction, in order to get rid of the consequences of such an avowal. For instance, they distinguished three things in respect to language, the designating or the word, and that which is designated or the thing (*πρᾶγμα*), and, lastly, that which exists really; and then maintained that the distinction of true or false is not to be looked for in the word, but in that which is designated, or the thing. Nevertheless, by thing they did not mean that which is, but merely that which is expressed in language, or the expressible, that which exists merely in the conception of a being capable of language, or an emotion of the soul expressed in words, whereas the actual object, the true thing, is that which exists really, and different from the thing which is the object of the conception.<sup>39</sup> From this it is clear that, with the Stoics,

<sup>38</sup> Ib. vii. 38. τὴν δὲ ἀλήθειαν οἰονταί τινες καὶ μάλιστα οἱ ἀπὸ τῆς στοᾶς διαφέρειν τᾷ ληθοῦς. — οὐσίᾳ μὲν, παρόσον ἢ μὲν ἀλήθεια σῶμά ἐστι, τὸ δὲ ἀληθὲς ἀσώματον ὑπῆρχε. καὶ εἰκότως φασί. τοῦτι μὲν γὰρ ἀξίωμα ἐστὶ, τὸ δὲ ἀξίωμα λεκτόν, τὸ δὲ λεκτὸν ἀσώματον. Ib. viii. 10. ὃ περ ἀσώματον ἀξίωμα καθεστὼς νοητὸν εἶναι.

<sup>39</sup> Ib. 11. οἱ ἀπὸ τῆς στοᾶς τρία φάμενοι συζυγεῖν ἀλλήλοις, τό τε σημαίνον καὶ τὸ σημαῖνον καὶ τὸ τυγχάνον· ὧν σημαῖνον μὲν εἶναι φωνήν, οἷον τὴν Δίῳν, σημαίνονμενον δὲ αὐτὸ τὸ πρᾶγμα τὸ ὑπ' αὐτῆς δηλούμενον καὶ οὐ ἡμεῖς μὲν ἀντιλαμβανόμεθα τῇ ἡμετέρᾳ παρυφισταμένον διανοίᾳ. — τυγχάνον δὲ τὸ ἐκτὸς ὑποκείμενον, ὥσπερ αὐτὸς ὁ Δίῳν. τούτων δὲ δύο μὲν εἶναι σώματα, καθάπερ τὴν φωνήν καὶ τὸ τυγχάνον, ἐν δὲ ἀσώματον, ὥσπερ τὸ σημαίνονμεν πρᾶγμα καὶ λεκτόν. Ib. 79. ἡξίουσι οἱ Στωικοὶ κοινῶς ἐν λεκτῷ τὸ ἀληθὲς εἶναι καὶ τὸ ψεῦδος. λεκτὸν δὲ ὑπάρχειν φασί



all generals and intelligibles have no existence except in the thought, and are formed solely in relation to the laws of language; but that, on the contrary, whatever really is must be regarded as individual, and as that which strikes the senses. In conformity with such a view, the Stoics necessarily despaired of the possibility of an immediate cognition in science of the true essence of things.

This result of their investigations, the Stoics, after the manner of Socrates, made to bear upon their theory of definitions. If the essence of a thing is to be expressed in the definition, and if real things exist only in individuality, it is impossible to give a correct definition without pointing out all the properties of things. On this account, Chrysippus explained a definition as being the indication of the property; in which explanation the general is entirely disregarded. But in science the general cannot be overlooked; and, even though it might appear to the Stoics that the property contains all the force of the general, they could not fail to perceive, that in the exposition of our thoughts, it is important to arrange the indivi-

τὸ κατὰ λογικὴν φαντασίαν ὑφιστάμενον λογικὴν δὲ εἶναι φαντασίαν, καθ' ἣν τὸ φαντασθῆναι ἐστὶ λόγῳ παραστήσαι. Diog. Laert. vii. 63; Senec. Ep. 117. Sunt, inquit, naturæ corporum, tanquam hic homo est, hic equus; has deinde sequuntur motus animorum enunciativi corporum. Hi habent proprium quiddam et a corporibus seductum, tanquam video Catonem ambulantem; hoc sensus ostendit, animus credit; corpus est, quod video, cui et oculos et animum intendi; dico deinde: Cato ambulat; non corpus quidem est, quod nunc loquor, sed enunciativum quiddam de corpore, quod alii effatum vocant, alii enunciatum, alii edictum. On the whole, Tiedemann, *ibid.* p. 166, has rightly expressed the idea of the λεκτόν; Petersen, on the contrary, *ibid.* p. 172, has allowed himself to be deceived by the expression πρᾶγμα.

<sup>20</sup> Bekker, *Anecd. Gr.* ii. p. 647. ὁ δὲ Χρύσιππος λέγει, ὅτι ὅρος ἐστὶ ἡ τοῦ ἰδίου ἀπόδοσις. Compare also Diog. Laert. vii. 60; Suid. s. v. ὅρος.

dual under its legitimate species and genera ; and, accordingly, their own investigations into the reciprocal relations of genera and species, prove that they were well convinced of this truth. The genus they explained as a union of several thoughts, which among themselves are inseparable ;<sup>31</sup> from which it is evident that the formation of the higher genera has for its object the natural and necessary co-ordination of the lower. This method of the subordination of the lower general ideas to the higher, led them to the question how, in respect to ideas, higher and lower are to be determined ; and in this respect they agreed in determining that the lowest are ideas of individual objects, while, as to the highest, a difference of opinion existed as to whether it is the idea of 'somewhat,' or that of being.<sup>32</sup>

With these inquiries into the mutual co-ordination of general ideas, their theory of the categories seems to have been connected. Although this theory is not expressly given to any one of the older Stoics, it is, nevertheless, most probable that it was completely developed by them, inasmuch as we meet occasionally with traces of it among the older members of the school, and especially in the fragments of Chrysippus.<sup>33</sup> In their determination

<sup>31</sup> Diog. Laert. l. l.

<sup>32</sup> Ib. 61 ; Senec. Ep. 58.

<sup>33</sup> On this subject I appeal to the work of Petersen, which treats of not only the categories, but their further subdivisions and import in the general theory of the Stoics. He appears, however, to have followed out certain indistinct traces afforded by our statements concerning them, further than can be done with historical certainty, and thereby been led into conjectures which he is as far from having entirely supported as they are capable of being entirely refuted. Moreover, he over-estimates the importance of these divisions for the doctrine of Chrysippus, the spirit of which is far from lying in these mere principia of

of the categories, they followed the model of Aristotle, notwithstanding that they appear to have given to them a very different signification. For it is not without the appearance of reason that the Stoics have been numbered with those who understand by categories simple ideas or highest genera.<sup>34</sup> At least we find that the Stoics referred the categories to one highest general idea. On this, however, they were not, as above remarked, agreed; it is, however, evident that the view which made it to be the idea of being, was the older of the two; for it was in opposition to it that the objection was first urged, that non-being also is capable of being an object of thought, as is proved by the possibility of forming a conception of things which do not exist, and that, therefore, 'somewhat' must be regarded as the highest idea under which both being and non-being are comprised.<sup>35</sup> This doctrine, which appears to have advanced even so early as by Chrysippus,<sup>36</sup> proves clearly that, with the Stoics, conception in general was regarded as a something which might be taken without regard to and independently of objective reality, since they held that the idea of 'somewhat' may stand for non-being, i. e. for a mere arbitrary creation of the imagination.

When, now, we proceed to determine the relation between the categories of the Stoics, and their highest idea, we begin sensibly to feel the defi-

investigation. This is proved by the work of Petersen itself, which, whatever are its merits in other respects, throws no light on the essence of the Stoical doctrine.

<sup>34</sup> *Simpl. Cat.* fol. 3 a. in.; cf. *Peters.* p. 37.

<sup>35</sup> *Senec.* l. 1.

<sup>36</sup> At least he distinguishes the *ὄν* and the *τί*. *Stob. Ecl.* i. p. 390 sq.

ciency, not to say inaccuracy, of our information concerning the Stoical doctrine. By some statements on this head, we should be led to believe that the categories were regarded as those general ideas which stand immediately under that of 'something,'<sup>37</sup> from which it would follow that they posited under the categories whatever indicates a non-being, or what exists merely in the conception. This statement appears not improbable; for, in fact, the incorporeal, which they posited as a species of entity, might have also been regarded, in another respect, as non-being. Nevertheless, we prefer, as a safer course, to follow another view, which makes the categories to indicate merely species of being. The number of categories admitted by the Stoics was four; the substrate, or that which lies as the ground (*ὑποκείμενον*), that which has a quality (*ποιόν*), that which has some general relation, and that which has a particular relation to some other.<sup>38</sup> With this division, which was evidently intended to give greater scientific precision to Aristotle's table of categories, the Stoics seem to have united the design of ascertaining certain general determinations of the modes of being, so far as they are capable of being made an object of science. This design affords another instance of the invariable practice of the ancients to combine with their investigations

<sup>37</sup> Plotin. Enn. vi. l. i. 25. This passage, as well as the polemic which follows, refers unquestionably to the Stoics. The manner of Plotinus justifies us in looking upon much of what he ascribes to the Stoics as a weak inference of his own from their principles.

<sup>38</sup> Simpl. Cat. fol. 16 b. *ποιοῦνται γὰρ τὴν τομὴν εἰς τέσσαρα· εἰς ὑποκείμενα καὶ ποιὰ καὶ πῶς ἔχοντα καὶ πρὸς τί πως ἔχοντα.*

in logic, as the basis of all scientific research, the inquiry into the object of the sciences in general. It is not improbable also, that the division of the categories was made to agree with the forms of language, for in general the ancients observed a close connection between logic and grammar. Nevertheless, the traces which appear to lead to this conclusion, are very deceptive; for although there is agreement in number between the four categories and the four parts of speech admitted by the earliest Stoics—the article, the noun, the verb, and the conjunction,—of which, moreover, the arrangement agrees with that of the categories,<sup>39</sup> nevertheless we find that Chrysippus himself, to whom in all probability we are chiefly indebted for the table of the categories, added a fifth part of speech to the four previously admitted, by dividing the noun into proper and common, and that his successors multiplied the parts of speech in a like manner,<sup>40</sup> by which procedure the analogy between the forms of speech and the forms of thought, if ever it was really intended, was completely destroyed. However this may be, the metaphysical point of view from which they arranged their table of categories, may be easily seized. At the first glance it is evident that its members gradually advance in a relation of comprehensiveness.<sup>41</sup> The series commences with that

<sup>39</sup> So Petersen, p. 226.

<sup>40</sup> Dionys. Hal. de Comp. Verb. c. 2 in.; Diog. Laert. vii. 57 c. not. Menag.; Galen. de Hipp. et Plat. Plac. viii. p. 242. As to the number of parts of speech these accounts agree, although not as to their names.

<sup>41</sup> Simpl. Cat. fol. 44 b. ὁ δὲ τὴν στάσιν καὶ τὴν κάθισιν μὴ προσποιούμενος (sc. τοῖς οὐσίαν) εἰσὶ Στωϊκῇ τινὶ συνηθείᾳ συνέπισθαι, οὐθὲν ἄλλο ἢ

which serves as the substrate, of which they were wont to say, that it alone exists, whereas all differences in it have not a proper persistence, but merely a variable relation to the substrate, which is the imperishable essence of things. Next in order is that which has a quality or property, of which it must be observed that, with the Stoics, it indicates, in its proper sense, whatever resides in a thing permanently, and, as it were inseparably, agreeably to the proper nature of things, and not by any external force.<sup>192</sup> That this second category, while it is inferior to the first, is nevertheless more important than the third, or that which is some general relation, must be clear, when we consider that the latter indicates a perishable mode, which has its ground from without, and not in the inner essence of the thing. Lastly, the fourth category manifestly stands for the lowest possible object of thought, for that which is only in some particular relation to some other, can only designate a thing under some particular determination, which does not result from its own nature, and its own manner of being, but from that of some other in relation to it. For this reason, the Stoics distinguished between the relative (*τὸ πρὸς τι*) and the correlative. Sweet and bitter, black and white, for instance, are relative, for it is only relatively to sensation that an object appears either one or the other; still it is only by virtue of its own proper

*τὸ ὑποκείμενον εἶναι νομίζων, τὰς δὲ περὶ αὐτὸ διαφορὰς ἀνυποστάτους ἡγούμενος καὶ πῶς ἔχοντα αὐτὰ ἀποκαλῶν, ὥς ἐν τοῖς ὑποκειμένοις ἔχοντα αὐτὸ τοῦτο τὸ πῶς ἔχειν.*

<sup>192</sup> Simpl. Cat. p. 55 a; b; 61.

and peculiar nature, that it is able to appear such ; whereas, on the contrary, that which exists only in some particular relation to other, has not its ground in the peculiar nature of the thing, but results merely from the relation which it enters into with other. Such, for instance, are the ideas of father, the right side, and the like, since the relation of father ceases on the death of the child, and he who is posted on the right ceases to be so by the changed position of his comrades.<sup>43</sup> From this it is clear that by this category the Stoics intended to designate whatever is without essential importance, for the things to which it is ascribed have but merely an accidental relation. We must here observe that the Stoics evinced a desire to give to their science a higher import than could belong to it, as a mere result of experience, when admitting, with Plato and Aristotle, that science and sensation are merely relative, they nevertheless maintained that the relative has its ground in the proper nature of things.

The Stoical theory of the categories bears a general affinity to that of Aristotle, but especially in this, that in both, the essence and the subject are regarded as the highest object of thought, to

<sup>43</sup> Ib. fol. 42 b sq. *εἰ δὲ δεῖ σαφέστερον μεταλαβεῖν τὰ λεγόμενα, πρὸς τι μὲν λέγουσι ὅσα κατ' οἰκίον χαρακτηρὰ διακείμενά πως ἀπονέμει πρὸς ἕτερον· πρὸς τι δὲ πως ἔχοντα, ὅσα πέφυκε συμβαίνειν τινὶ καὶ μὴ συμβαίνειν ἀνευ τῆς περὶ αὐτὰ μεταβολῆς καὶ ἀλλοιώσεως μετὰ τοῦ πρὸς τὸ ἐκτὸς ἀποβλέπειν, ὥστε ὅταν μὲν κατὰ διαφορὰν τι διακείμενον πρὸς ἕτερον νεύσῃ, πρὸς τι μόνον τοῦτο ἔσται, ὡς ἡ ἔξις καὶ ἡ ἐπιστήμη καὶ ἡ αἴσθησις, ὅταν δὲ μὴ κατὰ τὴν ἐνοῦσαν διαφορὰν, κατὰ ψιλὴν δὲ τὴν πρὸς ἕτερον σχέσιν θεωρῇται, πρὸς τί πως ἔχοντα ἔσται· ὁ γὰρ υἱὸς καὶ ὁ δεξιὸς ἐξωθέν τινων προσδίδονται πρὸς τὴν ὑπόστασιν. διὸ καὶ μηδεμίᾳ γινομένης περὶ αὐτὰ μεταβολῆς γίνονται· ἂν οὐκίτι πατήρ τοῦ υἱοῦ ἀποθανόντος, ὁ δὲ δεξιὸς τοῦ παρακειμένου μεταστάντος. τὸ δὲ γλυκὺ καὶ πικρὸν οὐκ ἂν ἀλλοῖα γένοιτο, εἰ μὴ συμμεταβάλλοι καὶ ἡ περὶ αὐτὰ δύναμις.*

which all else must be referred, and which alone possesses an absolute entity. In the Stoical system this idea is expressed even more distinctly than in the Aristotelian; and particularly enforced by the immediate reference of all the other categories to the subject. For the categories of the latter do not stand for the mere property, relation, etc. but, that which has quality, i. e. a substance which produces out of itself a property, and that which is in some general relation, i. e. a substance which finds itself in a certain accidental relation. These two the Stoics carefully distinguished; and even taught that, although opposite kinds of quality and relation are possible, yet there cannot be an essence having a quality or relation opposed to another essence of a contrary quality or relation.<sup>44</sup> Indeed, we may presume that the Stoics adopted this doctrine, which we formerly met with in Aristotle, in a still wider sense, for they attempted to show by the categories that as all the others must ultimately be reduced to the subject, so the subject cannot be otherwise conceived of than as a universal principle without a contrary. To this result, indeed, the division of the categories necessarily led; for, as it distinguished that which has a property, or a general relation in itself, or a particular relation to other, from that which is the substrate of all, the fundamental principle could only be that which has neither quality nor distinction.<sup>45</sup> The consequence

<sup>44</sup> Ib. fol. 98 b. τοὺς μέντοι ποιоὺς καὶ πῶς ἔχοντας οὐκ εἶτι ὑπέλαβον ἰναντίους, ἀλλ' ἰναντίως ἔχειν καὶ τοῦτον τοῦτω, ἀλλὰ μίσως τὸν φρόνιμον τῷ ἀφρονι λέγουσιν.

<sup>45</sup> Simpl. Cat. fol. 12 b. does, it is true, distinguish two kinds of ὑποκείμενον,



of such a conclusion is an inconsistency in the Stoical doctrine, similar to that which we formerly met with in Aristotle. The general ideas by which man endeavours to seize, and scientifically to comprehend all objects, appeared to them to be the empty creations of his representative faculty; they refused to regard aught but the individual as essential; ultimately, however, they were forced to ascribe to the general the highest value in logic, nay, a value and importance of such a kind as apparently compromised the truth and reality of the individual. To such a contradiction they could not have been led by aught else than by some confusion in their very theory of the universal.

matter, without proper and individual things. The latter, however, are called *ὑποκείμενα* in an improper sense, for they are *κοινῶς ἢ ἰδίως ποιοί*. Plut. de Stoic. Rep. 43. *καίτοι πανταχοῦ τὴν ὕλην ἀργὸν ἐξ ἑαυτῆς καὶ ἀκίνητον ὑποκείσθαι ταῖς ποιότησιν ἀποφαίνουσι, τὰς δὲ ποιότητας πνεύματα οὕσας καὶ τόνους ἀερώδεις, οἷς ἂν ἐγγίνωνται μέρεσι τῆς ὕλης εἰδοποιεῖν ἕκαστα καὶ σχηματίζειν.* Marc. Ant. xii. 30. *μία οὐσία κοινή, καὶ διειργηταὶ ἰδίως ποιοῖς σώμασι μυρίοις.*

## CHAPTER IV.

### PHYSICS OF THE EARLIER STOICS.

THE logic of the Stoics could not, evidently, serve as the foundation of their physics. The only analogy between these two parts of their philosophy is the tone of sentiment which pervades them both. Indeed, we should no more be justified in asserting that the Stoical doctrine of nature, and of the relation of the universal to the particular, was a consequence, from their theory of human knowledge, of their table of categories, than that their reduction of all knowledge to sensation, grew out of their denial of any other than a material reality, and of their viewing the subject as the general, in consequence of their conviction of the necessity of recognising a single universal force of nature. Both opinions are, it is true, closely allied to each other; they follow from a common point of view; nevertheless, their connection is not of such a nature as that either can be regarded as the principle of the other.

On the other hand, it is obvious that the Stoics were as much influenced in their physics as in their logic by the opinions of Aristotle. This influence is traceable not less in particular doctrines than in its general character, especially when we take into consideration the manner in which the later Peripatetics had gradually modified the principles of

their master. In the Aristotelian system it was difficult to reconcile the assumption of the eternal motion of the universe with the eternal immobility of God ; and the supposition of an eternal matter and an eternal form, appeared, by the admission of a twofold principle of things, to be destructive of the unity of principle which is essential to science. On the other hand, there was no difficulty in supposing that the world exists by virtue of itself, by producing motion out of and in itself ; and, accordingly, Strato had already advanced a theory of the world in which he represented it as a living being, the source of its own motion, and existing independently of any foreign cause. This view was adopted by the Stoics, who thereby rejected the pure form of Aristotle, or the *ideas* of Plato—that is to say, whatever is the object of cognition by the pure reason. With such a view, it was quite consistent in them to regard everything as material, and, moreover, conformable with the course of their logical theory, of which the tendency was, to derive all knowledge from sensation. And as we previously observed in both Plato and Aristotle an inclination to regard whatever is material as something corporeal, we cannot but consider it as a legitimate consequence of the anterior development of philosophy, when the Stoics looked upon everything to be body. It was in this latter point of view that physics began to appear to them the basis of all philosophy. In this respect they were in harmony with the spirit of their age ; nevertheless, they are distinguished from the Epicureans in that, notwithstanding their purely materialistic tendency, they

did not absolutely reject the supreme ideal of the reason, but found a place for it in matter itself. Herein their views approximated very closely to the pre-Socratic philosophy, and especially to the dynamicists: of whom Heraclitus stood high in their estimation, and they are indebted to him for many points of their theory, which, however, they have greatly enriched by the results attained by the researches of the Socratical schools.

Now, if physics be rightly defined, the investigation of the cause or causes of natural events, it must, according to the Stoics, confine its inquiry to bodies. For a cause is that through which anything exists or is effected; now, nothing except body can produce any effect. This is a general principle of their school,<sup>1</sup> the grounds of which seem to have been derived from their view of the nature of the contrariety between corporeal and incorporeal. Of the latter they admitted four kinds; vacuum, place, time, and the expressible.<sup>2</sup> From this it is clear that they did not reckon among the incorporeal aught that is a thing—nor even aught that is an essential determination of things. For we showed before, that the expressible indicates whatever does not belong essentially to things, but accrues to them accidentally, by some relation to thought and language. For this they did not regard the effect as corporeal, but merely that wherein the effect is produced. That is to say, they com-

<sup>1</sup> Stob. Ecl. i. p. 336. αἴτιον δὲ ὁ Ζήνων φησὶν, δι' ὃ. οὐ δὲ αἴτιον συμβεβηκός. καὶ τὸ μὴ αἴτιον σῶμα, οὐ δὲ αἴτιον κατηγορημα. Ib. p. 338; Diog. Laert. vii. 56. πᾶν γὰρ τὸ ποιοῦν σῶμά ἐστι. Cic. Ac. i. 11; Plut. de Pl. Ph. iv. 20.

<sup>2</sup> Sext. Emp. adv. Math. x. 218; cf. Diog. Laert. vii. 140, 141.

prised the effected or the effect in the idea of the expressible and the unessential determination of things, to which even, in fact, they referred the most expressive assertions regarding things.<sup>3</sup> For it is the obvious tendency of this Stoical doctrine to reduce whatever is essential in things to the corporeal, and to reckon all effects in, or accidents of them, as unessential. Herewith agrees their table of categories, the first two indicating the corporeal, the last two what is incorporeal.

. According to this view, the idea of body must naturally be taken in a wider sense than that which is usually given to it. Originally, they made it to be coextensive with that of spacial extension, defining body to be that which is extended in three dimensions.<sup>4</sup> But they subjoined the closer determination, that body must at the same time be something which is active or passive.<sup>5</sup> To the mathematical signification of body, therefore, they attached the physical property of possessing a faculty to act, or capacity to suffer. By this means, the Stoics were able to class under body, much

<sup>3</sup> Stob. II. 11.; Sext. Emp. adv. Math. vii. 38. *τὴν δὲ ἀλήθειαν οἰοῦνται τινες καὶ μάλιστα οἱ ἀπὸ τῆς στοᾶς διαφέρειν τἀληθοῦς. — παρόσον ἡ μὲν ἀλήθεια σῶμά ἐστι, τὸ δὲ ἀληθὲς ἀσώματον ὑπῆρχε· καὶ εἰκότως, φασί· τοῦτ' ἢ μὲν γὰρ ἀξίωμα ἐστι, τὸ δὲ ἀξίωμα λεκτόν, τὸ δὲ λεκτόν ἀσώματον.* IX. 211; Senec. Ep. 117. At sapere — incorporeale est et accidens alteri, id est sapientiz. When Cicero, ib. says, Nec vero aut quod efficeret aliquid, aut quod efficeretur, posse esse non corpus, his expression is at least inaccurate. Not that which is effected, but that wherein aught is effected, is a body. On this point see the express declarations of Zeno and Posidonius in Stobæus; ib.

<sup>4</sup> Diog. Laert. vii. 135.

<sup>5</sup> Plut. de Pl. Ph. iv. 20. *πάν γὰρ τὸ δρῶμενον ἢ καὶ ποιῶν σῶμα. — ἔτι πάν τὸ κινῶν καὶ ἐνοχλοῦν σῶμά ἐστι. — ἔτι πάν τὸ κινούμενον σῶμά ἐστι.* Senec. Ep. 89. *Corporum locus — in ea (sc. dividitur), quæ faciunt et quæ ex his gignuntur.*

that their opponents regarded as incorporeal. Thus, in the first place, the soul, as both active and passive, was necessarily regarded by them as corporeal.<sup>6</sup> And even though the Peripatetics and the Epicureans may have preceded the Stoics in this direction, they nevertheless fell far behind them. For, according to the latter, virtue and vice, the thoughts and dispositions of the soul, the several faculties both of body and soul, the parts of time, such as the year, the seasons, day and night, are bodies; for they said, all these are both active and passive.<sup>7</sup> All this is not only singular, but even contradictory to their doctrine, previously noticed, of the incorporeity of time, and of whatever is an effect in things. Accordingly, we are driven to the supposition that, in these doctrines, the Stoics employed certain terms and expressions in a peculiar signification, and that their seeming absurdity arises from their being interpreted in their ordinary sense. In the first place, the apparent inconsistency in their considering time as incorporeal, but contrariwise, the parts of it as corporeal, is at once reconciled by supposing that they looked upon time itself as purely general, and as abstracted from all objective contents; while they conceived of the parts of time, such as the day and the night, in all their reality, as determinate portions of the mundane development.<sup>8</sup> In a similar manner they may

<sup>6</sup> Diog. Laert. vii. 156; Nemes. de Nat. Hom. c. 2. p. 32 sq. ed. Antverp.

<sup>7</sup> Plut. adv. Stoic. 45. ἀλλὰ πρὸς τούτοις ἔτι καὶ τὰς ἐνεργείας σώματα καὶ ζῶα ποιοῦσι, τὸν περίπατον ζῶον, τὴν ὄρχησιν, τὴν ὑπόθεισιν, τὴν προσαγόρευσιν, τὴν λοιδορίαν, κ. τ. λ. Senec. Ep. 106, 117.

<sup>8</sup> Consult the definitions of the seasons according to Chrysippus, in Stob. Ecl. i. p. 260, 262.

have given the name of body to the several corporeal agencies, in so far as, permanently subsisting in the essence of objects, they exercise an influence on their development, while, on the other hand, they regarded them as incorporeal, in so far as they are merely effects, or the objects of assertion. This distinction would ultimately revert to that which they took between a property and a general relation; whatever has a property, and even properties themselves, they looked upon as bodies, and explained them to be modes of air.<sup>9</sup> The result of such a view is, to obviate those distinctions which would separate from the thing itself what essentially belongs to it;—or, in other words, every abstraction of a property from its subject. On this account, the Stoics held that the property is the body itself. This opinion exhibits itself as the natural result of that impulsion of thought which, commencing with Plato, extended through Aristotle to the Stoics. The Platonic theory of ideas distinctly separated the essential properties, or the essence of things, from their sensible base; this procedure Aristotle had showed to be invalid, and maintained that the essence could not be conceived of otherwise than as the union of form with matter, or, in other words, of the essential properties with the material basis; which, however, the Stoics lastly maintained to be inseparable. Their object was, to conceive of the real in its perfect unity.

<sup>9</sup> Plut. de Stoic. Rep. 43. οὐδὲν ἄλλο τὰς ἕξεις πλὴν αἴρας εἶναι φησιν (sc. ὁ Χρόσιππος) — καίτοι πανταχοῦ τὴν ὕλην ἀργὸν ἐξ ἑαυτῆς καὶ ἀκίνητον ὑποκείσθαι ταῖς ποιότησιν ἀποφαίνουσι, τὰς δὲ ποιότητας πνεύματα οὕσας καὶ τόνους ἀερώδεις, οἷς ἀν' ἐγγίνωνται μέρεισι τῆς ὕλης εἶδοποιεῖν ἕκαστα καὶ σχηματίζειν.

That with this object in view they confounded the merely phenomenal with the true essence of things, is undeniable ; but, on the other hand, it is undeniable that they employed the term 'body' in a very different sense from that in which it is employed by those who only apply it to the external appearance of things.

There is another remarkable point in their modification of the idea of body, which perhaps may have grown out of their considering the properties of things as bodies, and modes of air. It cannot be denied that in the same body, that is, in the same spacially extended object, there may be together several properties, consequently, several bodies ; the Stoics, therefore, were forced to reject the position, that all bodies wholly fill the space they occupy. Again, the extension of a property over a space they appear to have regarded as a penetrating of this space by the corporeal property ; and, accordingly, they denied the impenetrability of bodies. On the contrary, they maintained that several bodies interpenetrate and coexist in the same space ;<sup>10</sup> by which assumption they, in fact, substituted for the notion of a body filling space, that of a force which, together with other forces, fills space. In this respect, while they involved themselves in the same confusion of ideas as the earlier dynamicists, their materialism assumes a very different character from that of Democritus or Epicurus. The materialism of the latter was the result of an endeavour to deny all inner forces, and to explain

<sup>10</sup> Stob. Ecl. i. p. 376. ἀρέσκει γὰρ αὐτοῖς σῶμα διὰ σώματος ἀντιπαρήκειν. Plut. adv. Stoic. 37 ; Alex. Aphrod. de Mixt. fol. 141.



them entirely by the external phenomena in space, whereas the chief object of the Stoics was the recognition of an essential force as the basis of all phenomena; and it was only in the attempt to connect, as closely as possible, the internal force and the external phenomena, that they failed in their object of completely identifying the two.

This view gave rise to the distinction they drew between the activity and the passivity of bodies, and, at the same time, to a necessity of establishing the closest possible affinity between them. Their doctrine of body consists of two parts, one treating of that which acts, the other of that which is effected.<sup>11</sup> The passive, as a ground of things, is matter without property or quality; the active, on the other hand, is God in matter.<sup>12</sup> Matter, as the passive ground of things, is the primary subject and the universal essence; <sup>13</sup> God, however, as the active and formative force, is essentially united to matter,<sup>14</sup> as also, on the other hand, matter is inseparable from the active force, for the latter is in and pervades the former.<sup>15</sup> Zeus is himself both the universal nature and its rational ground; heaven

<sup>11</sup> Senec. Ep. 89.

<sup>12</sup> Diog. Laert. vii. 134. *δοκεῖ δ' αὐτοῖς ἀρχὰς εἶναι τῶν ὅλων δύο, τὸ ποιοῦν καὶ τὸ πάσχον. τὸ μὲν οὖν πάσχον εἶναι τὴν ἄποιον οὐσίαν, τὴν ὕλην· τὸ δὲ ποιοῦν τὸν ἐν αὐτῇ λόγον, τὸν θεόν.* Plut. de Pl. Ph. i. 3; Sext. Emp. adv. Math. ix. 11.

<sup>13</sup> Simpl. Cat. fol. 12 b. *ἡ τε γὰρ ἄποιος ὕλη — πρῶτόν ἐστι τοῦ ὑποκειμένου σημαινόμενον.* Plot. Enn. vi. l. i. 25; Anton. xii. 30. *οὐσία κοινή.* Diog. Laert. vii. 150. *οὐσίαν δὲ φασὶ τῶν ὄντων ἀπάντων τὴν πρώτην ὕλην — καλεῖται δὲ διχῶς, οὐσία τε καὶ ὕλη.* Stob. Ecl. i. p. 324.

<sup>14</sup> Syrian. in Arist. Met. ii. ap. Petersen, p. 50. *ἄλλων δὲ καὶ ποιητικὴν μὲν αἰτίαν ἀπολειπόντων, ἀχώριστον δὲ ταύτην τῆς ὕλης, καθάπερ οἱ Στωικοί.*

<sup>15</sup> Stob. Ecl. i. p. 322.

and the world are simply the substance or matter of God;<sup>16</sup> and even if the heaven and the world pass away, yet both matter and God endure for ever; and the dissolution of heaven and the world is nothing else than the resumption, by God, of matter into himself, who produced it originally out of himself, and can again do so.<sup>17</sup> From this it is clear that the Stoics conceived of the unity of God and matter as a single thing, which, when considered from the side of its passive and changeable potentiality, is called matter, but God when viewed from that of its active and constantly identical force.

Now matter, considered by itself, is the fundamental basis of all entity; according to Zeno, that alone is, which participates in substance, that is, in matter;<sup>18</sup> and, as we elsewhere saw, that alone which is the substrate and ground of all things, exists in the truest and highest sense; all else has only so far part in entity as it participates in the universal ground or matter. Thus, then, does the doctrine of the Stoics, so far as its phraseology is concerned, exhibit a direct opposition to that of Plato; this, however, is only accomplished by their neglecting, in these formulæ, all consideration of the forms with which matter necessarily invests

<sup>16</sup> Diog. Laert. vii. 148. οὐσίαν δὲ θεοῦ Ζήνων μὲν φησι τὸν ὅλον κόσμον καὶ τὸν οὐρανόν. Plut. de Stoic. Rep. 34.

<sup>17</sup> Diog. Laert. vii. 134. τὰς μὲν γὰρ (sc. ἀρχάς) εἶναι ἀγεννήτους καὶ ἀφθάρτους. Ib. 137. λέγουσι δὲ κόσμον τριχῶς· αὐτόν τε τὸν θεόν, τὸν ἐκ τῆς ἀπάσης οὐσίας ἰδίως ποίον, ὃς δὴ ἀφθαρτός ἐστι καὶ ἀγέννητος, δημιουργὸς ὦν τῆς διακοσμήσεως, κατὰ χρόνων ποιάς περιόδους ἀναλίσκων εἰς ἑαυτὸν τὴν ἅπασαν οὐσίαν καὶ πάλιν ἐξ ἑαυτοῦ γεννῶν. Plut. de Stoic. Rep. 39; adv. Stoic. 36.

<sup>18</sup> Stob. Ecl. ii. p. 90. ταῦτ' εἶναι φησιν ὁ Ζήνων, ὅσα οὐσίας μετέχει.

itself. For although matter in itself is without form or property, it nevertheless is never found without some property or form.<sup>19</sup> It is the ground of all that becomes, and for this reason simply it is susceptible of infinite changes.<sup>20</sup> As absolutely passive, it must also, like body, be infinitely divisible. But the Stoics cautiously guarded against the appearance of admitting, as an inference from the preceding doctrine, the infinite magnitude of matter; and to this the attention of Chrysippus was particularly directed, as the only means by which he could obviate many of the fallacious deductions of the Megarian school. He appears, therefore, to have followed Aristotle in maintaining that this power of infinite division never becomes actual, and that the imperceptible is the limit of all actual division.<sup>21</sup> And the Stoics were under the greater necessity to establish this point, the more decidedly they opposed that other opinion of Aristotle, that matter is indefinite or indeterminate. The conflicting views of the Stoics and Aristotle, on this subject, arose from the different directions they pursued in philosophy. Both were so far agreed as to deny the actual existence of the infinite, and on this account Chrysippus taught that as nothing does not form a limit, so it is itself without limits. For the same reason, infinity belongs to whatever is incorporeal, time, space, and the

<sup>19</sup> Stob. Ecl. i. p. 324. *δεῖ δ' ἐν τινι σχήματι καὶ ποιότητι εἶναι.* After Posidonius.

<sup>20</sup> Diog. Laert. vii. 150, where we must evidently read *παθητή*.

<sup>21</sup> Diog. Laert. vii. 150, 151; Stob. Ecl. i. p. 344; Sext. adv. Math. x. 142; Cic. Ac. i. 7.

like; whereas the corporeal cannot be infinite.<sup>22</sup> But now, with Aristotle, matter was somewhat unreal; but the Stoics, on the contrary, regarded it as the primary and truly real ground of all things, and on this account used to call it a body.<sup>23</sup> Now the view that matter is finite and determinate, necessarily leads to the conclusion that the world itself has its finite limits, and that the matter of it is identical, never becoming in mass either more or less;<sup>24</sup> but that this mundane mass is surrounded by an infinite void. Without the world, and not in it, is there vacuum.<sup>25</sup>

The ground which the Stoics had for thus banishing vacuum from the world was undoubtedly a desire to consider the world to be a whole. As they conceived of this unity of the world as a corporeal unity, they sought, of necessity, to exclude all separation of its several parts by any interjacent void space.<sup>26</sup> This, again, is the reason of their conceiving of the active force as God, i. e. as a unity of the force which holds together the whole world, and gives to all individual bodies their determinate forms. In other words, we are decidedly of opinion that the hypothesis of the unity and unbroken coherence of all the parts of the world is the true

<sup>22</sup> Stob. Ecl. i. p. 392. καθάπερ δὲ τὸ σωματικὸν πεπερασμένον εἶναι, οὕτως τὸ ἀσώματον ἄπειρον· ὃ τε γὰρ χρόνος ἄπειρος καὶ τὸ κενόν. ὥσπερ γὰρ τὸ μηδὲν οὐδὲν ἐστὶ πέρας, οὕτως καὶ τοῦ μηδενός, οἷόν ἐστι τὸ κενόν.

<sup>23</sup> Diog. Laert. vii. 150; Aristocl. ap. Euseb. Pr. Ev. xv. 14.

<sup>24</sup> Stob. Ecl. i. p. 322, 324; Diog. Laert. vii. 150.

<sup>25</sup> Stob. Ecl. i. p. 382, 390, 392; Diog. Laert. vii. 143; Plut. de Pl. Ph. ii. 1; adv. Stoic. 30.

<sup>26</sup> Diog. Laert. vii. 140. ἐν δὲ τῷ κόσμῳ μηδὲν εἶναι κενόν, ἀλλ' ἡνωσθαι αὐτόν· τοῦτο γὰρ ἀναγκάζειν τὴν τῶν οὐρανίων πρὸς τὰ ἐπίγεια σύμπνοιν καὶ συντονίαν.

and proper foundation of the Stoical theory of God. We meet with, it is true, many arguments of the Stoics designed to prove the existence of God, or rather of gods; but the value of these arguments differs greatly, and there is not, perhaps, any other point of their whole theory so deficient as this in strict form and coherency. It almost seems as if the authors scarcely knew what they had properly in view by them, or from what principle they ought to set out, and still less do they appear to have duly appreciated the value of these reasonings. The tendency of some is merely to prove the existence of a divine principle, without reference either to its oneness or its plurality, while others seek to demonstrate the existence of a single God. To the first class belong all such as are derived from the universal conviction of all men that gods exist; from the sense of religion, or from the necessity of admitting the existence of some superior being to man:<sup>27</sup> all of which evidently cannot concern us in the present place, where we are treating solely of the universal active force. In reference to this the Stoics must have had in view principally two points: on the one hand to prove that the whole world is ruled by a single force alone, and then, on the other, that this is truly a divine, that is, an intelligent force. To consider the latter first of all; they, in this respect, appealed to the orderly disposition and motions of the universe, which cannot be regarded as effects either of chance, or of a force

<sup>27</sup> Cic. de Nat. D. ii. 2. *Opinionum enim commenta delet dies, naturæ judicia confirmat.* Ib. 6.

acting blindly without foresight or intelligence.<sup>28</sup> Moreover, certain parts of the world are endued with sense and reason, and these must have emanated from the whole ; the world, therefore, must be supposed to resemble a living being, in whom they must, of necessity, be a ruling portion, a divine force, a moving and vital principle.<sup>29</sup> As among natural objects one is better than another; as this is also the case with souls; so there must be a best nature, a best soul, a best living being, and this is the world or God; but, now, the best cannot be without reason or wisdom, and, therefore, there must be a supreme rational substance.<sup>30</sup> Now in all these arguments it is implied that the world is a unity held together by an active prime cause of all. The oneness of this force the Stoics did indeed seek to demonstrate, but the attempt is so weak that we must evidently regard it as an original assumption of their theory, rather than as a well-established conclusion. Even though they may have attempted to prove that the world cannot be conceived either as a plurality of separate bodies, or even of bodies connected together by simple coherence in space, but that it is one body, all of whose parts are bound together by an internal link of reciprocal action and passion;<sup>31</sup> though, likewise, they may have sought to demonstrate the coherent vitality of all the parts of the world by teaching that all things are pervaded by a life-giving fire;<sup>32</sup> yet these are,

<sup>28</sup> Cic. de Nat. D. ii. 5; Sext. Emp. adv. Math. ix. 111 sq.

<sup>29</sup> Cic. ib. 6—8; Sext. Emp. ib. 101.

<sup>30</sup> Cic. ib. 8; Sext. Emp. ib. 88.

<sup>31</sup> Sext. Emp. ib. 78 sq.

<sup>32</sup> Cic. ib. 9, 10.

at best, but so many special illustrations of a principle, which does not admit of being proved by any number of such demonstrable facts; but has its ultimate foundation in their conception of the causal coherence of mundane things as illimitable and universal. This universality of causal connection Chrysippus illustrated by saying that a single drop of wine poured into the ocean mixes with all its waters, and that thereby this mixture extends its influence to the whole universe.<sup>33</sup> This view they further sought to explain by supposing that the material agencies interpenetrate in space, and that universal matter is pervaded by a breath or vapour, by which its parts are drawn and held together, and a perfect harmony of entity and influence produced.<sup>34</sup> By this breath they understood the universal active first cause—God or reason, which pervades all in the same manner, as the soul does man, however differently it may manifest itself in different objects, as the all-connecting energy.<sup>35</sup>

What was the nature of the Stoical conception of God is clear from the foregoing. It is entirely relative to the two points already mentioned; that he is the vital force which pervades and rules the

<sup>33</sup> Plut. adv. Stoic. 37. Χρύσιππος — οὐδὲν ἀπέχειν φάμενος οἴνου σταλαγμόν ἵνα κεράσαι τὴν θάλατταν· καὶ ἵνα δὴ μὴ τοῦτο θαυμάζωμεν, εἰς ὅλον φησὶ τὸν κόσμον διατενεῖν τῇ κράσει τὸν σταλαγμόν. Diog. Laert. vii. 151; Galen. de Hipp. et Plat. Plac. vii. p. 215.

<sup>34</sup> Alex. Aphrod. de Mixt. fol. 142 a. ἡνῶσθαι μὲν ὑποτίθεται τὴν σύμπαν οὐσίαν, πνεύματός τινος διὰ πάσης αὐτῆς διήκοντος, ὃς οὐ συνάγεται τε καὶ συμμένει καὶ συμπαθὲς ἐστὶν αὐτῷ.

<sup>35</sup> Diog. Laert. vii. 138. τὸν δὲ κόσμον οἰκεῖσθαι κατὰ νοῦν καὶ πρόνοιαν — εἰς ἅπαν αὐτοῦ μέρος διήκοντος τοῦ νοῦ, καθάπερ ἐφ' ἡμῶν τῆς ψυχῆς· ἀλλ' ἡδὲ δι' ὧν μὲν μάλλον, δι' ὧν δὲ ἥττον, κ. τ. λ.

world, and that he is the universal reason. These two mutually determine the relation of each other to their general theory; the one presenting the physical, the other the moral aspect of their idea of God. Considered from the latter point of view, God is the eternal reason which governs the universe and pervades all matter;<sup>36</sup> he is the good providence which looks not less to the individual than to all;<sup>37</sup> he is wise, and the source of that natural law which enjoins good and forbids evil;<sup>38</sup> he punishes all violation of law, and rewards the good;<sup>39</sup> he is perfect, and endued with a consciousness of felicity.<sup>40</sup> Viewed in a physical light, God is the moving force of matter,<sup>41</sup> the universal nature, without which, not even the least of things is produced;<sup>42</sup> he is the destiny (*εἰμαρμένη*) which constrains all by certain necessary laws of causal connection and the necessity of all things;<sup>43</sup> he is the life-giving soul of the world, which has a natural tendency to produce all out of itself as from out of a seed.<sup>44</sup> This latter view presents the point of the transition to another conception by which the

<sup>36</sup> Diog. Laert. i. 1. ; Cic. de Nat. D. i. 14 ; Plut. de Stoic. Rep. 34.

<sup>37</sup> Plut. l. 1 ; adv. Stoic. 36 ; Diog. Laert. vii. 147 ; Cic. de Nat. D. ii. 65.

<sup>38</sup> Cic. de Nat. D. i. 14.

<sup>39</sup> Plut. de Stoic. Rep. 35 ; adv. Stoic. 33.

<sup>40</sup> Diog. Laert. i. 1. θεὸν δὲ εἶναι ζῶον ἀθάνατον, λογικόν, τέλειον ἢ νοερόν ἐν εὐδαιμονίᾳ, κακοῦ παντὸς ἀνεπίδεκτον, προνοητικὸν κόσμου τε καὶ τῶν ἐν κόσμῳ.

<sup>41</sup> Stob. Ecl. i. p. 178.

<sup>42</sup> Plut. de Stoic. Rep. 34. οὐθὲν γάρ ἐστιν ἄλλως τῶν κατὰ μέρος γενέσθαι οὐδὲ τοῦλάχιστον ἢ κατὰ τὴν κοινὴν φύσιν καὶ κατὰ τὴν ἐκείνης λόγον. Cic. de Nat. D. i. 15.

<sup>43</sup> Plut. l. 1. ; Diog. Laert. vii. 135 ; Cic. de Nat. D. i. 15. *Fatalem umbram* (?) et necessitatem rerum futurarum. Cf. Stob. Ecl. i. p. 180.

<sup>44</sup> Cic. de Nat. D. ii. 9, 10.



Stoics gave greater precision to their idea of God. It has been seen that it was a current opinion among the Greeks, and even among their philosophers, that the soul, and even reason, consists in the vital heat, or at least in some sensuously perceptible force, with which the vital heat is inseparably connected. It is true that this opinion had met with occasional opposition, and among its adversaries none were more earnest than Plato and Aristotle. Nevertheless, it is undeniable that Aristotle, in his attempt to explain the nature and manner of the connection between the soul and the physical phenomena of body, and its operation in the latter, was unable to free himself entirely from the common opinions of his nation, and has so confounded the all-pervading heat of life with the notion of the soul, as at best, to have left but a slight distinction between them, which too he derived from the general principles of science rather than from the domain of empirical notions. This distinction would naturally disappear again in an age which attempted to reduce everything to experience and sensation; and, accordingly, we cannot feel surprised to find the Stoics decidedly pursuing this tendency, and identifying the soul of the world, or God, with the vital heat and its physical principle. This tendency presents another point of resemblance between the Stoical doctrine and the dynamical physiologists before the time of Socrates. The Stoics, however, expressed themselves on this point in a variety of ways. Sometimes they called God the rational breath which pervades all nature; at others, the artistic fire which forms or creates

the whole world ; at others again, he is the ether,<sup>45</sup> which, however, they made to be the same as the artistic fire. From these varying terms, it is clear that the real object of the Stoics was far from being to exhibit the idea of God in any determinate, individual, and physical mode of existence ; they only employed these modes of expression to convey the idea that God, as the universal life-giving force, is inseparably bound up with some corporeal activity.<sup>46</sup>

Nevertheless, in all these representations, God is in some respects conceived of as distinct and separate from matter. God fashions, disposes, and moves matter ; as the soul of the world, he is opposed to its body ; and, although in this respect, the notion of a universal mundane fire or ether attaches itself to all these representations of God, a certain opposition is nevertheless maintained between him and the other kinds of things. But, as we previously remarked, such a distinction was far from being intended by the Stoical theory. On the contrary, the obvious tendency of their doctrines was to identify, as completely as possible, matter and form in every veritable entity ; and it is precisely under this point of view that God appeared to them as a body, and yet as a living and imperishable being,<sup>47</sup> which does not, it is true,

<sup>45</sup> Plut. de Pl. Ph. i. 6, 7. οἱ Στωικοὶ κοινότερον θεὸν ἀποφαίνονταί πῦρ τεχνικὸν ὁδῶ βαδίζον ἐπὶ γενίσει κόσμου — καὶ πνεῦμα μὲν διῆκον δι' ὅλου τοῦ κόσμου. — τὸν δ' ἀνωτάτῳ πάντων νοῦν ἐν αἰθέρι. Stob. Ecl. i. p. 64 sq. ; Diog. Laert. vii. 139 ; Cic. de Nat. D. i. 14, 15.

<sup>46</sup> Stob. Ecl. i. p. 66. καὶ πνεῦμα μὲν διῆκον δι' ὅλου τοῦ κόσμου, τὰς δὲ προσηγορίας μεταλαμβάνον διὰ τὰς τῆς ὕλης, δι' ἧς κεχώρηκε, παραλλάξεις.

<sup>47</sup> Diog. Laert. vii. 147 ; Cic. de Nat. D. ii. 17.

resemble man in shape, but yet, like him, consists both of soul and body.<sup>48</sup> Now the unity of the divine soul and divine body is the world, and therefore the Stoics are unanimous in holding that God is the world; i. e., matter endowed with a certain quality and form, together with the active force contained therein.<sup>49</sup> By this explanation the Stoics still preserved, in a certain but very subordinate sense, the distinction between God and the world. This distinction lay in three points, principally. The first was the difference which they drew between the passive and the active, of which we have already treated. The second was that between body and soul, which again passes into the distinction between the nobler and the better, on the one hand, and the worse and less perfect, on the other. The former the Stoics distinguished from the latter as the divine in the highest sense, according to which representation the less perfect parts of the world must, in some degree, be regarded as not divine. From this point of view, they were led to adopt a certain dominant part (*ἡγεμονικόν*) in the rational parts of the world, which pervades and animates all things, and indicates the divine force in them. This leading principle Zeno and Chrysippus placed in the ether of the highest heavenly sphere, Cleanthes in the sun.<sup>50</sup> But there is yet a third point

<sup>48</sup> Plut. adv. Stoic. 36. λέγει γοῦν Χρύσιππος ἰουκίναί τῳ μὲν ἀνθρώπῳ τὸν Δία καὶ τὸν κόσμον, τῳ δὲ ψυχῇ τὴν πρόνοιαν.

<sup>49</sup> Diog. Laert. vii. 137 sq. αὐτὸν δὲ τὸν θεὸν τὸν ἐκ τῆς ἀπάσης οὐσίας ἰδίως ποίον. — καὶ ἔστι κόσμος ὁ ἰδίως ποιὼς τῆς τῶν ὅλων οὐσίας. Ib. 148. οὐσίαν δὲ θεοῦ Ζήνων μὲν φησι τὸν ὅλον κόσμον καὶ τὸν οὐρανόν. Stob. Ecl. i. p. 444; Cic. de Nat. D. i. 14, 15; Arius Didymus ap. Eus. Pr. Ev. xv. 15.

<sup>50</sup> Cic. Ac. ii. 41; de Nat. D. i. 14, 15; Diog. Laert. vii. 139; Euseb. l. l. The two first passages of Cicero do not agree.

wherein God was distinguished from the world ; in so far, that is, as, according to them, God produces the world out of himself, and is originally in absolute unity ; but afterwards, upon producing out of himself the multiplicity of the world, he therewith distributes himself. This unity of the life of God was, to the Stoics, as it were, the pure God, who comprises all matter within himself ; whereas this multiplicity of things is the world in a proper sense, which, in certain respects, is opposed to the soul of the world, or the divine unity of all force ;<sup>51</sup> under this point of view, indeed, God may be conceived of as opposed to every individual entity in the world, and yet standing in reciprocity with it.<sup>52</sup> After all, however, it is evident that in these contrarieties between God and the world, the two terms are taken in a restricted signification. In the most general sense, the world of the Stoics is eternal, and one with God ; and it is only as having passed into the multiplicity of ordinate things, that it possesses a fleeting order and arrangement which will subsequently return into the fundamental unity of the divine essence.<sup>53</sup>

The last mentioned distinction of the Stoics between God and the world brings us to a consideration of their view of the cosmopœia. Agreeably to

<sup>51</sup> Plut. de Stoic. Rep. 39 ; adv. Stoic. 36. ἐπὶ (ἐκ) μιᾶς οὐσίαςδ' ὑο ἰδίως γενίσθαι ποιούς καὶ τὴν αὐτὴν οὐσίαν ἕνα ποιῶν ἰδίως ἔχουσιν ἐπιόντος ἑτέρου διχέσθαι καὶ διαφυλάττειν ὁμοίως ἀμφοτέρους. — λέγει γοῦν Χρῆσιππος ἰοικέναι τῷ μὲν ἀνθρώπῳ τὸν Δία καὶ τὸν κόσμον, τῷ δὲ ψυχῇ τὴν πρόνοιαν· ὅταν οὖν ἐκπύρωσις γίνηται μόνον ἄφθαρτον ὄντα τὸν Δία τῶν θεῶν ἀναχωρεῖν ἐπὶ τὴν πρόνοιαν, εἶτα ὁμοῦ γενομένους ἐπὶ μιᾶς τῆς τοῦ αἰθέρος οὐσίας διατελεῖν ἀμφοτέρους. Euseb. l. l.

<sup>52</sup> Plut. adv. Stoic. 33.

<sup>53</sup> Euseb. l. l. διὸ κατὰ μὲν τὴν προτέραν ἀπόδοσιν αἰδίον τὸν κόσμον εἶναι φασὶ κατὰ δὲ τὴν διακόσμησιν γεννητὸν καὶ μεταβλητὸν.

their idea of God they could not possibly conceive otherwise of the origin of the world than as of a generation by the divine living force, out of the matter which is combined or united with it. In the beginning, they taught, God existed for himself; subsequently, he changed all matter into different elements. In this representation God is conceived of as the unity of matter and moving forms, for he produces matter out of himself.<sup>54</sup> Connected therewith is also the view that God is the artistic fire, out of which, as from a seed, the cosmopœia issues.<sup>55</sup> The transmutation of fire into the other element is described by Chrysippus as a secretion of the contrariety between the soul and body. At first, when God was all fire, he was altogether life and living essence; when, however, the fire partially extinguishes itself, it transmutes into a corporeal species, and consists, from this time, of body and soul.<sup>56</sup> In this doctrine the Stoics follow Heraclitus, almost without variation. They agree with him in teaching that, in the mundane development, fire proceeds in a certain fixed course, and obeys a fixed law, in obedience to which it passes through

<sup>54</sup> Diog. Laert. vii. 136, 137.

<sup>55</sup> Stob. Ecl. i. p. 414. Ζήνωνι καὶ Κλεάνθει καὶ Χρυσίππῳ ἀρέσκει τὴν οὐσίαν μεταβάλλειν ὅλον εἰς σπέρμα εἰς τὸ πῦρ καὶ πάλιν ἐκ τούτου τοιαύτην ἀποτελεῖσθαι τὴν διακόσμησιν, οἷα πρότερον ἦν. Here the return of the matter of the world is first described, and then the new formation.

<sup>56</sup> Plut. de Stoic. Rep. 41. καὶ μὴν ὅταν ἐκπύρῳσις γίνηται, διώλου ζῆν καὶ ζῶον εἶναι φησὶ· σβεννύμενον δ' αὖθις καὶ παχυνόμενον εἰς ὕδωρ καὶ γῆν καὶ τὸ σωματοειδὲς τρέπισθαι. λέγει δ' ἐν τῷ πρώτῳ περὶ προνοίας· διώλου μὲν γὰρ ὦν ὁ κόσμος πυρώδης εὐθὺς καὶ ψυχὴ ἴστιν ἑαυτοῦ καὶ ἡγεμονικόν· ὅτε δὲ μεταβαλὼν (μετίβαλεν) εἰς τε τὸ ὑγρόν καὶ τὴν ἑναπολειφθεῖσαν ψυχὴν, τρόπον τινὰ εἰς σῶμα καὶ ψυχὴν μεταβάλλων, ὥστε συνεστάναι ἐκ τούτων, ἄλλον τινὰ ἔσχε λόγον. The emendation proposed by Wyttenbach alters the sense of this passage. Compare the passage quoted above from Plut. adv. Stoic. 36.

certain intermediate gradations and fixed periods, until it ultimately returns into itself, and closes with a universal conflagration.<sup>57</sup> Their reason for considering the mundane force to be fire was, because fire has motion in itself, and is a universally active force.<sup>58</sup> According to certain fixed laws of fate, all is produced and again destroyed at fixed times; for all is ordered by the laws of necessity, and has the life of a self-developing animal. Hence their favourite comparison of the Deity to a seed of things, out of which all parts of the world grow, as it were, regularly, and according to relations duly determined according to reason and design. This is their notion of a seed-relation (*σπερματικός λόγος*), which is in all things, and according to which all things exist. God is the rational seed-relation of the world; or, in other words, he comprises all the rational seed-relations which are subsequently developed in it.<sup>59</sup> These are first evolved in the mundane development, and out of the ori-

<sup>57</sup> Diog. Laert. vii. 137, 148, 156. δοκεῖ δὲ αὐτοῖς τὴν μὲν φύσιν εἶναι πῦρ τεχνικὸν ὁδῶ βαδίζον εἰς γένεσιν. Cic. de Nat. D. ii. 22, 32; Plut. de Pl. Ph. i. 7.

<sup>58</sup> Cic. de Nat. D. ii. 12; Diog. Laert. vii. 144.

<sup>59</sup> Diog. Laert. vii. 136. τοῦτον (sc. τὸν θεόν) σπερματικὸν λόγον ὄντα τοῦ κόσμου. Plut. de Pl. Ph. i. 7. πῦρ τεχνικὸν — ἡμπεριεληφὸς πάντας τοὺς σπερματικοὺς λόγους, καθ' οὗς ἕκαστα καθ' εἰμαρμίνην γίνονται. The idea of the *λόγος σπερματικός* combines the ideas of relation and of reason which are involved in *λόγος* with that of the natural development from a seed. This idea is given in greatest detail in a passage from Cleanthes, ap. Stob. Ecl. i. p. 372. ὥσπερ γὰρ ἐνός τινος τὰ μέρη πάντα φύεται ἐκ σπερμάτων ἐν τοῖς καθήκουσιν χρόνοις, οὕτω καὶ τοῦ ὅλου τὰ μέρη, ὧν καὶ τὰ ζῶα καὶ τὰ φυτὰ ὄντα τυγχάνει, ἐν τοῖς καθήκουσι χρόνοις φύεται. καὶ ὥσπερ τινὲς λόγοι τῶν μερῶν εἰς σπέρμα συνιόντες μίγνυνται καὶ αὐθις διακρίνονται γινομένων τῶν μερῶν, οὕτως ἐξ ἐνός τε πάντα γίνεσθαι καὶ ἐκ πάντων εἰς ἓν συγκρίνεσθαι, ὁδῶ καὶ συμφώνως διεξιούσης τῆς περιόδου. Cf. Chrys. ap. Galen. de Hipp. et Plat. Plac. iii. in. p. 112 Chart.

ginal unity of God are diffused into multiplicity, which may have been the reason why God is sometimes called by the Stoics,—the one-multitude.<sup>60</sup> The unfolding these seminal relations is effected by the eternal motion of matter, which, like a vortex, agitates all things together, and shapes them by necessity ; for no one of individual things—of material existences, is at rest ; all, in fact, is in constant decay, and is constantly being re-produced as new according to matter.<sup>61</sup> Thus, in this point also, the Stoics adopted the opinions of Heraclitus. But, at the same time, it is due to them to confess that they are far superior to this associate of their opinions, thanks to the progress which philosophy had gained since his day by the logical development of the Socratic schools. This superiority is chiefly evinced in that the Stoics distinguished that which in things is in continual flux as the matter of them, from the constant and permanent element, which, according to them, can be nothing else than the divine active force, the true entity which lives in and gives form to all things.<sup>62</sup> They were able to reduce to precision and distinctness what, in Heraclitus, was yet undefined and confused. But, at the same time, it is undeniable that thereby they did but distinguish two aspects of

<sup>60</sup> Syrian. in Arist. Met. ap. Petersen, p. 76. *ἐν πληθός*. Cf. Plut. adv. Stoic. 13.

<sup>61</sup> Plut. de Stoic. Rep. 34 ; adv. Stoic. 44. This alludes to an anecdote of Heraclitus.

<sup>62</sup> Plut. adv. Stoic. l. l. *ὡς δύο ἡμῶν ἕκαστός ἐστιν ὑποκείμενα, τὸ μὲν οὐσία, τὸ δὲ\* καὶ τὸ μὲν δεῖ βεῖ καὶ φέρεται, μήτε αὐξόμενον, μήτε μειούμενον, μήτε ὅλως ὅλον ἐστι διαμένον· τὸ δὲ διαμένει καὶ αὐξάνεται καὶ μειοῦται καὶ πάντα πάσχει τάναντία*. Petersen proposes to fill the chasm in the text by *ὁν*—the conjecture is probable.

things, which, otherwise, they represented to be as necessarily connected as the force of life is with fire. With the Stoics, as with Heraclitus, the artistic fire is an ever-living force, which, in certain successive periods, is constantly transmuting itself, notwithstanding that it ever retains its perfect identity. The soul of the world nourishes itself and continually grows, until at last it absorbs all matter into itself.<sup>63</sup>

Thus did the Stoics regard the mundane development as a period in the divine life, having its natural beginning and natural end. Both beginning and end, however, resemble each other, for in both matter and the active force, body and soul are perfectly united, the multiplicity of things is resolved into unity, and the all is God without any contrary. This return of all things into God, which is at the same time the beginning of a new development of the world, is naturally regarded as the most perfect development of life. The world indeed is perfect, but its parts are not so ;<sup>64</sup> in them the contrariety of good and evil is necessary, and much of necessity is mingled in the world ; and consequently evil will never cease to exist.<sup>65</sup> On the other hand, in the mundane conflagration evil will cease to be ; all will be rational and wise.<sup>66</sup> As, then, according to

<sup>63</sup> Plut. de Stoic. Rep. 39.

<sup>64</sup> Plut. de Stoic. Rep. 44.

<sup>65</sup> Ib. c. 35, 36, 37, 44.

<sup>66</sup> Plut. adv. Stoic. 17. *ὅταν ἐκπυρώσῃσι τὸν κόσμον οὗτοι, κακὸν μὲν οὐδ' ὅτι οὐκ ἀπολείπεται, τὸ δ' ὅλον φρόνιμόν ἐστι τὴν καὶ σοφόν.* Later Stoics, as, for instance, Posidonius, speak of the mundane conflagration as of a resolution of all things into void ; the grounds of which view we cannot here investigate. Plut. de Pl. Ph. ii. 9 ; Stob. Ecl. i. p. 390 ; Euseb. Pr. Ev.



this view, the mundane development is ever recurring to the same beginning of worlds, it was quite consistent in the Stoics to suppose that each succeeding formation is perfectly similar to the preceding; all returns according to the same laws by which it had previously been evolved.<sup>67</sup> This view the Stoics seem further to have connected with an attempt to determine the period of the mundane development by certain astronomical calculations of the great year, and therefore to make the conflagration and new formation of the world to coincide with the same relative position of the stars as when it previously happened.<sup>68</sup> Accordingly, then, this constant renovation may be regarded as a periodic revolution; which view, however, the Stoics could not have supported otherwise than by supposing that God must be conceived of a perfect vital activity drawing out of and again absorbing into himself his own perfection of life.

In this mode of view, however, the Stoics could not have overlooked the difficulty common to all theories, which consider becoming in the world as the process of the divine life, of accounting for the coexistence in the world of imperfections, defects, and of moral and physical evil, alongside of the perfect life of God. Accordingly, they applied themselves with great diligence to this problem, with-

xv. 40. It is not improbable that the earlier Stoics spoke of the mundane conflagration as a rarefaction of matter. Phil. de Incorr. Mundi, 19. p. 507, Mang.

<sup>67</sup> Nemes. de Nat. Hom. 38. p. 147 sq.; Numenius, ap. Eus. Pr. Ev. xv. 18; Chrysipp. ap. Lactant. Div. Inst. vii. 23.

<sup>68</sup> Nemes. l. l.; Numenius, ap. Eus. Pr. Ev. xv. 19.

out, however, being able to resolve it satisfactorily. In all that they adduced on this head, the hypothesis is involved that God must, agreeably to his own proper nature, enter into the mundane development, i. e. into a segregation of certain distinct states. From this segregation opposite forces naturally arise in the world, all of which have a limited measure of existence, and are consequently imperfect. As already stated, the parts of the world, simply as parts, are necessarily imperfect; still it is only when considered individually, that any one appears defective, faulty, or without beauty; when, however, we consider it in its co-ordination to the whole, it seems both necessary and to have a certain utility, without which the world itself could not be perfect. Thus a comedy may contain ridiculous and faulty passages, which, however, in the whole, have a certain grace and beauty.<sup>69</sup> The providence of God willed not the existence of warfare, disease, and other evils, but they arise in consequence of the good which God designed to realise in the world, without which these consequences would be impossible.<sup>70</sup> Some evils happen to the wicked for punishment; others to the good, by a different direction of things, which, however, tends to the universal good.<sup>71</sup> Thus has God composed out of good and ill a relation and harmony wherein the hateful and the adverse are reconciled and

<sup>69</sup> Plut. adv. Stoic. 14; cf. de Stoic. Rep. 21, 44. The leading position is the following: *τίλειον μὲν ὁ κόσμος σῶμά ἐστιν, οὐ τίλεια δὲ τὰ τοῦ κόσμου μέρη τῷ πρὸς τὸ ὅλον πως ἔχειν καὶ μὴ καθ' αὐτὰ εἶναι*. What I have called passages is, in the original, *ἐπιγράμματα*.

<sup>70</sup> Gell. vi. 1; Plut. de Stoic. Rep. 21, 44.

<sup>71</sup> Plut. ib. 35.

made friendly.<sup>72</sup> In these doctrines the Stoics looked chiefly to moral evil, which they necessarily regarded as real evil; but of which they maintained that it is good for the whole, and indispensable for the perfection of the world. God, it is true, wills not moral evil; and, as Chrysippus maintains, he must not even be looked upon as mediately its cause, because law can never be even mediately the cause of its own infractions:<sup>73</sup> but God wills that of which evil is the necessary consequence; and even the wicked involuntarily work out destiny, for vice is necessary for the production of virtue. Evil is effected not without advantage to the general system of things; for without evil, good could not be,<sup>74</sup> and it is, therefore, neither possible nor advisable to get rid of evil altogether.<sup>75</sup> In order to prove this, the Stoics appealed to the principle which, in a more purely physical sense, had been previously defended by Heraclitus,—that nothing can exist without its contrary, and consequently not even good without evil.<sup>76</sup> Justice could

<sup>72</sup> Cleanth. Hymn. 18 sq.:

ἀλλὰ σὺ καὶ τὰ περισσὰ ἐπίστασαι ἄρτια θεῖναι  
καὶ κοσμεῖς τὰ ἄκοσμα καὶ οὐ φίλα σοὶ φίλα ἰστίν·  
ὥδε γὰρ εἰς ἓν ἅπαντα συνήρμοκας ἰσθλὰ κακοῖσιν,  
ᾧσθ' ἔνα γίγνεσθαι πάντων λόγον αἰὲν ἰόντα.

<sup>73</sup> Plut. de Stoic. Rep. 33.

<sup>74</sup> Chrys. ap. Plut. adv. Stoic. 13. ἡ δὲ κακία πρὸς τὰ λοιπὰ συμπτώματα ἔχει ὅρον· γίνεται γὰρ αὐτὴ πῶς κατὰ τὸν τῆς φύσεως λόγον καί, ἵνα οὕτως εἴπω, οὐκ ἀχρήστως γίνεται πρὸς τὰ ἄλλα· οὐδὲ γὰρ ἂν τὰ γαθὸν ἦν. De Stoic. Rep. 35, where the same fragment is found with a few deviations.

<sup>75</sup> Chrys. ib. 36.

<sup>76</sup> Gell. 1. 1. Nihil est prorsus istis, inquit (sc. Chrysippus), imperitius, nihil insubidius, qui opinantur, bona esse potuisse, si non essent ibidem mala. Nam cum bona malis contraria sint, utraque necessum est opposita inter sese et quasi mutuo adverso quæque fulta nisu consistere; nullum adeo contrarium est sine contrario altero.

not be practised if there were no instances of injustice, nor courage without cowardice, nor truth without falsehood ; and generally, no single virtue without its corresponding vice ; there could be no distinction of good and evil if both did not exist together, and consequently no practical intelligence.<sup>77</sup>

In reality, however, it would appear that these explanations did not satisfy the Stoics themselves. They could not, in short, have any weight, except in so far as the validity of the hypothesis was admitted, that the living God is constrained by necessity to enter into an alternation of opposite activities of life. That this was not altogether overlooked by the Stoics, appears clear from a remarkable expression of Chrysippus. For he was driven, by a consideration of the evil existing in the world, to admit that much of necessity is mingled in the order of mundane things;<sup>78</sup> and to this cause he also seems to have referred the fact,—that in the perfect world there is much that is without object or design, in the same way as in the best regulated family many drops are spilled, and many grains wasted ; and further to have explained by it the supposed power of evil demons over the human race.<sup>79</sup> Now, if we call to mind the mode in which the necessary is opposed to the good, and matter to reason, in the doctrines of Aristotle and Plato, it is impossible to doubt but that Chrysippus adopted the same contrariety in a like sense. It is true, that the prin-

<sup>77</sup> L. l. ; Plut. adv. Stoic. 16, 17.

<sup>78</sup> Plut. de Stoic. Rep. 37. φησὶ δὲ πολὺ καὶ τὸ τῆς ἀνάγκης μίχθαι.

<sup>79</sup> L. l.

cipal object of the Stoics was to fuse, as completely as possible, material causes with the rational forces of God, in order to admit, apparently, only a single cause of all things; but they were, nevertheless, in a certain degree, driven, as already seen, to distinguish the divine, the truly perfect, the eternal and illimitable force, from the passive and the imperfect; and as they conceived of the latter in the sense of matter, the whole appeared to them merely as a material God, who, both in and out of himself, is subjected to the force of necessity. Hence, accordingly, the idea naturally arose that the artificer of the world has no power to change matter;<sup>80</sup> and this matter is that which produces evil and all imperfection in the world. The general foundation of this position is the view that God must make the matter which constitutes his entity, to circulate in continual mutations, and therefore is unable to abide in the perfect development of his force, which is the empyreal state of the world, but is found to proceed from it to a mundane formation; i. e. to the separation of those contraries which constitute the opposition of good and evil. It is only when viewed from this point that we shall be able fully to comprehend the full sense of that which the Stoics understood by Necessity or Fate. This idea is not grounded simply on the view that all in the world stands in casual connection together, and that the particular is dependent on the universal, and the subsequent on the earlier;<sup>81</sup> but it has

<sup>80</sup> Senec. de Prov. 5. Non potest artifex mutare materiem.

<sup>81</sup> Plut. de Pl. Ph. i. 27, 28; de Stoic. Rep. 23; Gell. vi. 2.

also its ground in the very essence or matter of God. The Stoics endeavoured, it is true, to think of God as the principle of this necessary dependence, and as one with it ; and consequently refused to admit that he is himself subject to necessity ; nevertheless, in their mode of representing the *cosmopœia*, they considered this nature, this necessity of matter, as the supreme law of all becoming, to which God himself appears subject, in so far, at least, as his rational force is dependent on his matter. His essence is a seed of the universe ; its development, its life, proceeds in the same necessary course as any natural seed ; and in this view it enters as a necessary element of the conception, that in order to attain to its perfection, the seed of the universe must pass through certain imperfect conditions of opposition, and of mutual conflict of its forces.

This remark gains confirmation the more we enter into details of their theory. Nevertheless, we shall here confine ourselves to a very few points. The general course of their physical investigations may be easily conjectured from a consideration of its leading principles ; and we have consequently only to notice what grew out of it, either by way of inference or enlargement. For, as we formerly remarked, the Stoics never entered into an exact examination of natural phenomena. On all subjects connected therewith, they adopted Aristotle as their guide, who, among the ancients, appears to have exhausted this domain of inquiry, and to have been looked upon by all subsequent writers of antiquity as a perfect authority. In a few

points only did the Stoics differ from him ; those, namely, which were strongly marked with the peculiar spirit of the Peripatetic philosophy ; and in these they followed either Plato or the popular opinion, or else, in order to carry out their general theory, boldly hazarded some novel conjecture.

As they regarded the world as the life of God, or even as God himself, and at the same time maintained the independent opposition therein of individual entities, it was only natural that they should venerate, as divine, certain individual beings of superior and extraordinary power. They spoke, in the language of Plato, of created gods, and approximated even more closely than he did to the polytheistic opinions of their nation. The more widely, in their age, a light spirit of doubt and disbelief in the popular theology had been diffused and nourished by the writings of the Sceptics, the Epicureans, and the New Academy, who were the natural opponents of the Stoics, the more sensibly may the latter have felt themselves constrained to take up the defence of the historical foundation of the popular sentiments on this subject, and to impress upon the minds of their disciples a feeling of reverence for those superior powers to which the human race is subject. This, however, they did without defending, strictly to the letter, all the extravagances of the popular opinion concerning their gods and religious ceremonies, but by adhering to what they believed to be the essence of the olden religion, and by interpreting in a new and peculiar sense of their own ; while as to the forms and spirit of the public ritual, much of these was left

open as a matter of free opinion. Thus Zeno condemned the worship of the images and the temples of the gods, in which he said nothing holier resided than the ornaments of art.<sup>82</sup> But they held, on the other hand, that the universal belief of all mankind in the existence of gods and their phenomenal manifestations ought not lightly to be despised; and this opinion they accordingly proceeded to bring in unison with their physical theory. Many of the popular deities they referred to the principal mundane bodies, the sun, the moon, and the stars; others to the elements, seasons, and other natural phenomena, and even to men who had acquired immortality by virtuous deeds, or by arts and inventions of great use and importance to humanity. All these objects, it must be remembered, were regarded by the Stoics as bodies and living forces; and it was only in a secondary sense that they considered them as gods;—they are created and perishable; at the mundane conflagration they will return into the common origin of things;—the supreme Zeus, who is the source of all life and all being, is alone uncreate and imperishable.<sup>83</sup> Such was the attempt of the Stoics to vindicate, by a free interpretation, the popular lore and legends of the gods. It is clearly manifest that in all this they were not, as it has been pretended, influenced by a fear of persecution, but by a holy reverence for the olden faith of their nation, which, however, they believed themselves justified in interpreting after a

<sup>82</sup> Clem. Alex. Strom. v. p. 584.

<sup>83</sup> Plut. de Stoic. Rep. 38; de Pl. Ph. i. 7; Cic. de Nat. D. i. 14, 15; ii. 23; Diog. Laert. vii. 147.



manner of their own.<sup>84</sup> Accordingly, in their views of religion, we discover little more than an artificial belief, such as is usually to be met with in an age which, from a lingering feeling of respect for the simple earnestness of antiquity, would endeavour to revive the ancient simplicity of immediate conviction; but having no other means but scientific speculation whereby to establish and confirm the need of such a faith, makes a vain although sincere effort to satisfy this feeling. In this direction the Stoics proceeded so far as to justify many superstitions which are necessarily combined with the defence of polytheism, and were easily reconcileable with their philosophical views. Thus they maintained the veracity of the oracles, soothsaying, and the interpretation of dreams, on which matters Chrysippus even composed long treatises,<sup>85</sup> as, indeed, he undertook to defend the belief in the existence of good and evil demons.<sup>86</sup>

When the ancients regarded the world as the work of God, they never failed to include in such a view that it must, simply on that account, have received a beautiful form and a beautiful adjustment of all its parts. This view was adopted by the Stoics in their conception of God or Nature as an artistic fire. For the art which they made its attribute was an art not of the useful alone, but also of the beautiful.<sup>87</sup> We are forced to confess,

<sup>84</sup> Cic. de Nat. D. ii. 24. *Physica ratio non inelegans inclusa est in impiis fabulas.*

<sup>85</sup> See Baguet, § 84, 91, 92.

<sup>86</sup> Diog. Laert. vii. 151; Plut. de Def. Orac. 17; de Stoic. Rep. 37.

<sup>87</sup> Cic. de Nat. D. ii. 22. *Talis igitur mens mundi cum sit, — hęc potissimum providet et in his maxime est occupata, primum ut mundus quam*

indeed, that they have not always illustrated this idea with the best taste,—for they lived in an age of corrupted taste,—at least, we must reckon among the deformities of their style of exposition the declaration of Chrysippus, that nature formed the peacock merely for the sake of its tail;<sup>88</sup> as well as the assertion, common to him with the other Stoics, that the hog was made merely for food and sacrifice, and that a living soul was given to it only as it were for salt, in order that it might not become putrid and rotten.<sup>89</sup> However, this principle of the beauty and utility of all things, is employed by them in a more general sense when they speak of the manifold variety of physical phenomena. Thus they make the beauty of the body to consist in the symmetry of its members, and the proportional adjustment of each to the whole.<sup>90</sup> Beauty, therefore, supposes a plurality of component members, and accordingly the Stoics appear to have thought that the greater the diversity of the members of a harmonical whole, the more perfect is its beauty. Consequently, they made the immense variety of the productions of nature the proof and evidence of its beauty and excellence. Proceeding probably from the view that the all-pervading causal connection which exists between mundane things, working everywhere differently, must give rise to an utter diversity in its objects, they as-

*aptissimus sit ad permanendum, deinde ut nulla re egeat, maxime autem ut in eo eximia pulchritudo sit atque omnis ornatus.*

<sup>88</sup> Plut. de Stoic. Rep. 21.

<sup>89</sup> Cic. de Nat. D. ii. 64. Other passages are given by Baguet, p. 182 sq.

<sup>90</sup> Chrys. ap. Galen. de Hipp. et Plat. Plac. v. p. 159. ἡ δ' ἐν τοῖς μέλεσι συμμετρία ἢ ἀσυμμετρία κάλλος ἢ αἰσχος. Ib. p. 162.

sumed that no single object is like any other ; and this, in short, constitutes the inimitable art of Nature, that in all its manifold productions she never copies or repeats herself.<sup>91</sup> As to the spherical form of the world, the Stoics probably considered it as the characteristic representative of that harmony of parts which constitutes the essence of beauty.<sup>92</sup>

Another point of agreement between the physiology of the Stoics and the earlier Socratic schools, is furnished by their positing a final cause of all mundane phenomena, on which they made all things to be dependent. But it is the peculiar merit of the Stoics that they carried out this view with greater precision, and that they insisted with greater earnestness upon its being the centre of all other ends. With too great particularity of details they sought, first of all, to show that plants were created to furnish food to the brutes, and brutes for the use and sustenance of man. Thus the horse is serviceable as a beast of burden, the dog for hunting, lions and bears for the exercise of courage ; consequently man avails himself of the services of all animals without doing them any injustice. They then proceeded to show that man himself exists for the sake of the gods, to contemplate and imitate them ; he neither exists for himself alone, nor is he perfection itself, although he

<sup>91</sup> Cic. Ac. ii. 18, 26. *Stoicum est, — nullum esse pilum omnibus rebus talem, qualis sit pilus alius, nullum granum. Senec. Ep. 113. Inter cætera, propter quæ mirabile divini artificis ingenium est, hoc quoque existimo, quod in tanta copia rerum nunquam in idem incidit; etiam quæ similia videntur, cum contuleris, diversa sunt.*

<sup>92</sup> Plut. de Pl. Ph. i. 6 ; ii. 2 ; Diog. Laert. vii. 140.

participates therein. Lastly, the gods, even, individually do not exist for themselves alone, but each for the sake of all collectively, of society among themselves.<sup>93</sup> We may further add, in the spirit of the Stoical theory, that as all living things individually are gradually advancing from an imperfect condition to a higher state of development,<sup>94</sup> so too the world or Zeus becomes more and more perfect; that the mundane conflagration, wherein Zeus resolves and assimilates all things, which are as it were his aliment, in and to himself, must be looked upon as the ultimate end of its development.<sup>95</sup> This view contains a sufficiently clear expression of the leading tendency of their theory, which is utterly to merge the individual in the universal.

In the investigation, however, of particular phenomena the Stoics ascribed, as we have previously observed, much to the force of the material principle. This is clearly manifest from their making the centripetal to be the primary motion of the universe,<sup>96</sup> for this could have rested on no other ground than the observed gravity of matter. But it is still more evident from their theory of the ele-

<sup>93</sup> Porphy. de Abstin. iii. 20; Cic. de Nat. D. ii. 14. Scite enim Chrysippus ut clipei causa involucrum, vaginam autem gladii, sic præter mundum cætera omnia aliorum causa esse generata, etc. De Fin. iii. 20. Præclare enim Chrysippus, cætera nata esse hominum causa et deorum, eos autem communitatis et societatis suæ, ut bestiis homines uti ad utilitatem suam possint sine injuria. Stob. Ecl. i. p. 444.

<sup>94</sup> Cic. de Nat. D. l. i.

<sup>95</sup> Plut. de Stoic. Rep. 39. τὸν Δία φησὶν (Χρύσιππος) αὐξεσθαι μέχρ' ἂν εἰς αὐτὸν ἅπαντα καταναλώσῃ.

<sup>96</sup> Plut. de Stoic. Rep. 44. The supposition of Chrysippus, that the world is in the centre of the infinite void space, while he elsewhere denies that the infinite has a centre or middle, appears merely an inaccuracy of language. Comp. Plut. de Def. Orac. 28.

ments. By this term they understood the simple qualities of body into which the primary substance first transmutes itself, and into which all things return previous to the universal conflagration, in which all resolves itself into the primal unity.<sup>97</sup> The number of these elements they made to be four,—fire, air, water, and earth; the ether of Aristotle was with them the same as fire; for the Stoics did not refer the elements to the several kinds of natural motion, but to the different sensible qualities of things; fire being corresponding to the warm, air to the cold, water to the moist, and earth to the dry.<sup>98</sup> It is clear from this process of derivation, that they drew a distinction between the elementary fire and the artistic fire, which is not an element but the universal ground of all elements; which, as such, has no determinate quality, and was compared by the Stoics to the animal warmth, which preserves and nourishes all, and is the source of its growth and health, whereas the elementary fire consumes and dissolves whatever it seizes upon.<sup>99</sup> The production of the elements out of the artistic fire was regarded as a natural and necessary course. The primary fire by condensation transmutes itself

<sup>97</sup> Thus we must understand the definition given in Diog. Laert. vii. 136. *ἔστι δὲ στοιχεῖον, ἐξ οὗ πρῶτον γίνεται τὰ γινόμενα καὶ εἰς ὃ ἰσχυρὸν ἀναλύεται.*

<sup>98</sup> Diog. Laert. vii. 137.

<sup>99</sup> Cic. de Nat. D. ii. 15; Plut. de Pl. Ph. i. 6; Stob. Ecl. i. p. 312 sq. This contrariety does not appear to be always observed; at least, in the passage that follows, we find the elementary formation passed over; but this perhaps is the fault of the author by whom it is quoted. That into which the world is resolved, is called by Chrysippus *ἀύγή*, by Cleanthes *φλόξ*. Philo de Incorr. Mundi, 18 p. 505. With this appears to agree that which Chrysippus calls the ether (the *ἡγεμονικόν*) of the world; for probably these expressions are designed to indicate a difference between the divine and the elementary fire.

into air; which, being yet further condensed, then becomes water; which by condensation, on the one hand, becomes earth, and, on the other, by evaporation and rarefaction becomes air; which again, being still more rarefied, becomes fire.<sup>100</sup> This metamorphosis is first set in action by, as it were, a precipitation; which, commencing at the centre of the world and thence extending its action, extinguishes the neighbouring fire; at which point, however, the circumjacent parts, which are by their nature fiery, begin to oppose themselves to it, and to exercise a counteraction. By means of these two forces the whole universe is formed.<sup>101</sup> Moreover, agreeably to the current opinions of the Greeks, these elements have their fixed regions in the universe, earth being in the centre, which is surrounded by the water towards the circumference of the world; then follows air; and lastly, fire which embraces and surrounds the whole.<sup>102</sup> The guiding principle throughout this whole representation is the notion of gravity, which attaches itself to that of greater and less density. Fire and air are, on account of their levity, necessarily carried upwards, but water and earth downwards by reason of their gravity.<sup>103</sup> The Aristotelian doctrine would appear to have furnished the idea that fire and air, as the warm and the cold, are the active agents in the world, but that earth and water are passive.<sup>104</sup> To carry out this view, however, it was

<sup>100</sup> Diog. Laert. vii. 142; Plut. de Stoic. Rep. 41.

<sup>101</sup> Something of this kind is contained in the confused passage from Cleanthes. Stob. Ecl. i. p. 372.

<sup>102</sup> Diog. Laert. vii. 137.

<sup>103</sup> Plut. de Pl. Ph. i. 12; Plut. de Stoic. Rep. 42.

<sup>104</sup> Nemes. de Nat. Hom. 5 p. 72.

necessary to assume that at least all terrestrial bodies are not pure elements, but a compound of all simple qualities.<sup>105</sup> This hypothesis, indeed, appears to be also implied in the Stoical doctrine that fire and air give to all bodies their appropriate qualities, and by a certain tension compress them into unity, and thereby effectuate the transmutation of the elements one into another.<sup>106</sup> In this view, fire and air are presented in a certain opposition to the other elements, and in a certain respect as identical with the active force which combines the elements and produces life in matter, which in and by itself is lifeless. The connection of this view with the general view of the Stoics is easily traceable. For as they regarded the elements as certain gradations of the condensation and the rarefaction of matter, or, as it were, certain fixed terms in the transmutation of fire, they could not well consider them as the pure and sole constituents of any individual object soever. On the contrary, they would necessarily regard them as the most marked and prominent grades in the development of the universal life, and admit of innumer-

<sup>105</sup> Senec. Qu. Nat. iii. 10.

<sup>106</sup> Plut. de Stoic. Rep. 43. οὐδὲν ἄλλο τὰς ἔξεις πλήν ἀέρας εἶναι φησι (Χρύσιππος)· ὑπὸ τούτων γὰρ συνέχεται τὰ σώματα. καὶ τοῦ ποιὸν ἵκαστον εἶναι τῶν ἔξει συνεχομένων αἴτιος ὁ συνέχων ἀήρ ἐστιν, ὃν σκληρότητα μὲν ἐν σιδήρῳ, πυκνότητα δ' ἐν λίθῳ, λευκότητα δ' ἐν ἀργύρῳ καλοῦσι. — τὰς δὲ ποιότητες πνεύματα οὐσας καὶ τόνους ἀερώδεις, οἷς ἀν' ἰγγένωνται μέρεσι τῆς ὕλης εἰδοποιεῖν ἕκαστα καὶ σχηματίζειν. Adv. Stoic. 49. γῆν μὲν γὰρ ἴσασι καὶ ὕδωρ οὔτε αὐτὰ συνέχουσιν οὔτε ἕτερα, πνευματικῆς δὲ μετοχῇ καὶ πυρώδους δυνάμεως τὴν ἐνότητα διαφυλάττειν· ἀέρα δὲ καὶ πῦρ αὐτῶν τ' εἶναι δι' εὐτονίαν εὐτακτικὰ καὶ τοῖς δυσὶν ἑκείνοις ἐγκεκράμμενα τόνον παρέχουσιν καὶ τὸ μόνιμον καὶ οὐσιῶδες. — ἀλλὰ τὴν ὕλην ὁ ἀήρ ὧδε μὲν συναγαγὼν καὶ πυκνώσας γῆν ἐποίησεν, ὧδε πάλιν δὲ διαλυθεῖσαν καὶ μαλαχθεῖσαν ὕδωρ.

able intermediate stages wherein there is neither fire, nor air, nor water, nor earth, but a complete fusion of any two proximate elements.<sup>107</sup> In such a view, the principal point was to determinate both the highest and lowest points in this development of life, which, however, cannot possibly be found among the ordinate things of the universe, but while the highest is to be placed in the mundane conflagration, we must suppose for the lowest a universal resolution of all things into water.<sup>108</sup> As to those intermediate states which alone are found in the world, they may, according to the varying preponderance of this or that constituent, be regarded either as air or fire, or as water or earth; and, in the former case, as more akin to the pure vital force; in the latter, as belonging to the subordinate domain of the passive principle; in such manner, however, that these contraries are never found purely separate in mundane things, but that the life-giving air and fire penetrate into and pervade the other elements.

These four elements the Stoics conceived to be arranged in successive spheres, after the manner of Plato and Aristotle, from whom they also adopted the doctrine that motion is propagated from above, whence, proceeding from the sphere of the fixed stars, it passes to the planets, and from thence to the earth. But even these spheres are not to be supposed to be of a purely elementary nature.<sup>109</sup> In this doc-

<sup>107</sup> According to the Stoics, this would be a mixture which they termed a σύγχυσις. Alex. Aphr. de Mixt. fol. 142 a; Stob. Ecl. i. p. 378.

<sup>108</sup> Diog. Laert. vii. 141. καὶ ὁ κόσμος δὲ (sc. ἐπιτεκτικὸς τῆς ἐπὶ τὸ χεῖρον μεταβολῆς.) ἔξανχμοῦται γὰρ καὶ ἐξυδατοῦται.

<sup>109</sup> Stob. Ecl. i. p. 446, 448; Diog. Laert. vii. 144 sqq. According to Po-



trine, however, there is nothing which is peculiar to the Stoics, who in their theory of individual things on earth attached themselves for the most part to the views of Aristotle, and some of the earliest conceptions of philosophy, without attempting to do more than give to them greater precision and accuracy of language. To this part of their doctrines belong the distinctions which they drew between inanimate things, plants, and animals. All individual objects are compositions of the elements, which, in things, penetrate into each other and form combinations (*κράσεις*), wherein the simple elements still retain their proper natures.<sup>110</sup> Inanimate objects, such as stone, wood, and the like, are held together by the oneness of their quality; they have only *one* property, which is given to them by the tension of the air which inwardly pervades them; and it is by this property alone that they preserve this unity. Plants, on the contrary, are composed of various constituents differing in quality. The principle by which their parts are combined and held together in unity was called by the Stoics 'nature,' and not a soul. Lastly, animals constitute unities which are held together by an indwelling soul,<sup>111</sup> which, however, is merely

sidonius, the sun is pure fire; but perhaps this must be understood merely as relatively. According to Antipater, not even the substance of God is without all commixture of air. Diog. Laert. vii. 148. According to Chrysippus, the purest ether pervades the whole mundane mixture. Ib. 139.

<sup>110</sup> Stob. Ecl. i. p. 376; Alex. Aphrod. l. l.

<sup>111</sup> Sext. Emp. adv. Math. ix. 81. τῶν ἠγνωμένων σωμάτων τὰ μὲν ὑπὸ ψιλῆς ἔξεως συνίχεται, τὰ δὲ ὑπὸ φύσεως, τὰ δὲ ὑπὸ ψυχῆς. καὶ ἔξεως μὲν ὡς λίθοι καὶ ξύλα, φύσεως δὲ καθάπερ τὰ φυτά, ψυχῆς δὲ τὰ ζῶα. Galen. de Hipp. et Plat. Plac. vi. p. 184. What is here called ψιλῆ ἔξις, is in other passages named μία ἔξις, but merely in opposition to such things as are mere

finer, warmer, and dryer, than nature, as taken in the above narrow signification of the term.<sup>112</sup> It is necessary to observe that this classification proceeds on the principle of a difference of degree, which is of such a nature that each lower is comprised in the next higher; thus the property is contained in the soul, and nature in the soul.<sup>113</sup> The highest term in this series of gradations is the rational soul, which is the combining and preserving principle not only of man, but also of the whole world; the rational soul is of necessity in the world, because the world has an irrational soul, and one member of a contrariety cannot exist without the other.<sup>114</sup>

The Stoical theory of the soul is, as it were, a minute summary of their general physiology. The soul they considered to be, like all other things, corporeal. But, in addition to the general arguments by which they established the corporeity of all things, they advanced special reasons to prove that the soul is corporeal, of which the most important were relative to the union of body and soul. Thus they observed that there is a reciprocal action and passion of the body and soul; the soul is in contact with the body, and in death is separated from

aggregations. Sext. Emp. adv. Math. vii. 102; ix. 78, c. not. Fabric. Philo. Leg. Alleg. ii. 7, p. 71, quotes this doctrine without naming the Stoics as its authors; when, however, he says *ἔστι δὲ ἡ φύσις ἕξις ἥδη κινουμένη*, he seems to give an incomplete passage, for the movement of plants is described as intrinsic.

<sup>112</sup> Plut. de Stoic. Rep. 41. *αὐτὸς δὲ (sc. Χρύσιππος) πάλιν τὴν ψυχὴν ἀραιότερον πνεῦμα τῆς φύσεως καὶ λεπτομερέστερον ἡγεῖται*. Galen. q. Anim. Mor. Sequ. Corp. Temp. 4, p. 449.

<sup>113</sup> Sext. Emp. adv. Math. ix. 84. *καὶ γὰρ τὰ ὑπὸ ψυχῆς διακρατούμενα πολὺ πρότερον ὑπὸ φύσεως συνείχετο*. Cf. Phil. l. l.

<sup>114</sup> Plut. de Solert. An. 2; cf. ib. 6.

it; now what is incorporeal cannot touch what is corporeal, nor be separated from it; consequently, the soul cannot be corporeal.<sup>115</sup> The greater the excellence of the soul, in their opinion, the more they must have supposed it to be like to fire. Accordingly, they called it either simply fire, a warm breath, warm air, or a vapour (*ἀναθυμίασις*);<sup>116</sup> influenced thereto, undoubtedly, by the view that although the soul of individual entities does not exactly come up to the perfection of the supreme God, it nevertheless of all things most nearly approaches to it in excellence. The union of the soul with body was regarded by the Stoics as a combination (*κρᾶσις*) of two bodies, constant, indeed, in their proper natures, but thoroughly pervading each other in all their parts,<sup>117</sup> in the same manner as the world is pervaded by the mundane soul, of which the individual is but a part.<sup>118</sup> Consistently with their whole view, the Stoics could not ascribe to individual souls, as parts of the universal soul, an immortality in the strict sense of the term; still, as they considered them as forming a peculiar kind of body, they were free to assume

<sup>115</sup> Nemes. de Nat. Hom. 2. p. 34. Χρύσιππος δὲ φησιν, ὅτι ὁ θάνατός ἐστι χωρισμός ψυχῆς ἀπὸ σώματος· οὐδὲν δὲ ἀσώματον ἀπὸ σώματος χωρίζεται· οὐδὲ γὰρ ἐφάπτεται σώματος ἀσώματον· ἡ δὲ ψυχὴ καὶ ἐφάπτεται καὶ χωρίζεται τοῦ σώματος· σῶμα ἄρα ἡ ψυχὴ.

<sup>116</sup> Cic. de Nat. D. iii. 14; Tusc. i. 9. Zenoni Stoico animus ignis videtur. Diog. Laert. vii. 157. Ζήνων δὲ ὁ Κιττιεὺς — πνεῦμα ἐνθερμον εἶναι τὴν ψυχὴν· τούτῳ γὰρ ἡμᾶς εἶναι ἐμπνέουσιν καὶ ὑπὸ τούτου κινεῖσθαι. Plat. de Pl. Ph. iv. 3; Galen. de Hipp. et Plat. Plac. ii. p. 110.

<sup>117</sup> Themist. de Anima, fol. 68 a. Ζήνωνι κίερασθαι ὄλην δι' ὅλου τοῦ σώματος φάσκοντι τὴν ψυχὴν. Chrys. ap. Galen. de Hipp. et Plat. Plac. iii. p. 112. ἡ ψυχὴ πνεῦμά ἐστι σύμφυτον ἡμῖν συνεχὲς παντὶ τῷ σώματι διήκειν, ἔστ' ἂν ἡ τῆς ζωῆς συμμετρία παρῇ ἐν τῷ σώματι.

<sup>118</sup> Diog. Laert. vii. 156.

that it will continue to subsist after death, until, in the general conflagration of all things, it shall be again absorbed into the whole from which it originally issued. How little calculated, however, the Stoical point of view was to legitimate and to give further definiteness to this doctrine, may be readily inferred from the variety of opinions which prevailed on this subject. Cleanthes, among others, taught that all souls would survive death; but that the intensity of existence would vary according to the weakness or firmness of the souls; with a view perhaps not to relieve the wicked from all apprehension of punishment in another life. Chrysippus, on the contrary, maintained that the stronger spirits of the wise and good would alone survive death.<sup>119</sup>

In the more detailed investigations of the Stoics into psychological phenomena, the influence of their peculiar view of philosophy is distinctly traceable. This characteristic of their philosophy is of a twofold nature;—the reduction, on the one hand, of the individual into the universal and a supreme force; on the other, an admission of the coexistence, alongside of this supreme force, of a multitude of individual forces, which are, in a manner, set off from the unity of force, and held by it, without any subdivision or intermediate members, in a certain universal relation to each other. Now the Stoics reduced all the phenomena of the soul to a certain universal force, by positing in the soul a ruling principle (*ἡγεμονικόν*), which must be regarded

<sup>119</sup> Diog. Laert. vii. 156, 157; Plut. de Pl. Ph. iv. 7; Arius Didym. ap. Eus. Pr. Ev. xv. 20.

as the source of all the mental activities.<sup>120</sup> To this supposition they were naturally driven by a desire to maintain the unity of the soul. Accordingly, with Chrysippus, this ruling force or principle is the same as that which is the subject or Ego.<sup>121</sup> The Stoics explain it to be that which directs and presides over sensation and instinct; <sup>122</sup> over sensation as the source of knowledge, and over instinct as the spring of desire and action. For this reason they looked upon the ruling principle as the intellect (*διανοία*) and the ground of language, and thought, and assent, as also of every resolution.<sup>123</sup> On this subject they combated the views of Plato and Aristotle, so far as they appear to ascribe parts to the soul without attempting to demonstrate its unity of being. Omitting all that is specious in this controversy, we shall find it to be essentially grounded on this, that the Stoics refused to admit such a rigorous opposition between the rational and irrational elements of the soul as Plato and Aristotle did; for the Stoics were so far from making sensuous perception and rational cognition to differ according to essence, that they merely regarded them as separate expressions of one and the same force. With them, the appetites and passions which

<sup>120</sup> Sext. Emp. adv. Math. ix. 102. πάσης γὰρ φύσεως καὶ ψυχῆς ἡ κατὰ ἀρχὴν τῆς κινήσεως γίνεσθαι δοκεῖ ἀπὸ ἡγεμονικοῦ καὶ πᾶσαι αἱ ἐπὶ τὰ μέρη τοῦ ὅλου ἐξαποστελλόμεναι δυνάμεις ὡς ἀπὸ τινος πηγῆς τοῦ ἡγεμονικοῦ ἐξαποστέλλονται, ὥστε πᾶσαν δύνανται τὴν περὶ τὸ μέρος οὖσαν καὶ περὶ τὸ ὅλον εἶναι διὰ τὸ ἀπὸ τοῦ ἐν αὐτῇ ἡγεμονικοῦ διαδίδεσθαι. Cic. de Nat. D. ii. 11.

<sup>121</sup> Galen. de Hipp. et Plat. Plac. ii. p. 89.

<sup>122</sup> Ib. p. 91. ἔστι δὲ τὸ ἡγεμονικόν, ὡς αὐτοὶ βούλονται, τὸ κατάρχον αἰσθήσεώς τε καὶ ὀρμῆς. Diog. Laert. vii. 159.

<sup>123</sup> Ib. p. 98, 99.

appear to resist reason, are but a corrupt reason which has fallen into strife with itself; a false judgment, which, however, belongs to and proceeds from the reason; <sup>124</sup> every appetite, every lust, every vehement desire, is an opinion; i. e. an incompletely developed knowledge. <sup>125</sup> This view followed regularly from their assumption that generally all kinds of entity in the world are merely grades of development of one and the same rational force; so that the so-called irrational activities cannot be regarded in any other light than as a less powerful force of reason, or one slightly changed and perverted from the right. <sup>126</sup> This view, taken strictly, destroys all distinction in kind between the faculties of the soul, and at the same time reduces the practical activity of the reason to the mere scientific thought. Still they did not intend thereby to deny all difference in the several faculties of the soul, but in the same way that God resolves himself into a number of forces, and in a manner must be

<sup>124</sup> Ib. iv. p. 135; Plut. de Virt. Mor. 7. This passage will enable us to explain how, with such a view, Chrysippus could yet speak of *ἐπιθυμία* and *θυμός* as the faculty of the soul: we must suppose it to be a false or imperfect faculty of cognition.

<sup>125</sup> Galen. l. l. *τὴν λύπην ὀριζόμενος δόξαν πρόσφατον κακοῦ παρουσίας*, and other definitions of a like kind. *ὀρίζεται γοῦν αὐτὴν* (sc. *τὴν ὀρεξίν*) *ὀρμὴν λογικὴν ἐπὶ τι ὅσον χρὴ ἡδον.* Diog. Laert. vii. 111. *δοκεῖ δ' αὐτοῖς τὰ πάθη κρίσεις εἶναι.* Cic. Tusc. iv. 7, 11.

<sup>126</sup> Galen. l. l. *τὴν τε γὰρ λύπην ὀριζόμενος μείωσιν εἶναι φησιν ἐπὶ φευκτῷ δοκοῦντι εἶναι, τὴν δ' ἡδονὴν ἔκτασιν.* The same result is favoured by the expressions *συστολαί*, *διαχύσεις*, *ἀτονίαι* and *ἐντονίαι*, *ἀσθένεια* and *ἰσχὺς*. Ib. p. 147. This may be easily reconciled with the doctrine of Chrysippus, and is not opposed even to that of Zeno, who, although he did not make the *πάθη* of the soul for judgments of the soul, nevertheless looked upon them as expansions and contractions of it, as elevations and depressions which follow the judgment. Ib. p. 139; v. p. 155. For even this view makes such states to be but different grades of the vigour or weakness of the intellect. The

conceived of as in opposition thereto, so, according to the Stoics, the ruling principle of the soul divides itself into a multitude of special forces, which are ruled and regulated by it. In making the heart the seat of this ruling principle, they did not rest upon any scientific argument, but were content to follow the general opinion, which boasted the sanction of Aristotle's authority. On this point, again, they sought to refute the doctrine of Plato.<sup>127</sup> From the heart the rational life extends its action and influence over the whole body. According to their usual practice of connecting all with corporeal phenomena, the Stoics were guided in their classification of the vital activities which are ruled by the reason, by the consideration of the several organs of their operation. Accordingly, they admitted eight parts of the soul,—the ruling portion in the heart,—five operating in the organs of sense, one in the organ of voice, and one in the organs of generation. The action of the ruling portion upon all the subordinate parts of the soul, was compared by

opinion that Cleanthes adopted the doctrine of Plato does not appear to be adequately proved by the verses quoted, *ib. v. p. 170* ; and the absence of any better proof speaks rather against it. There is more apparent reason in the objection to Chrysippus that he accounted for the irrational motions of the soul by a superfluity of *ὄρμη*. *Ib. p. 136 sq.* We do not know on what grounds the Stoics assumed that irrational animals have neither desires nor anger. *Ib. iii. p. 127 ; iv. p. 143.* Perhaps for these emotions they considered a certain measure of development of soul to be indispensable. At least Chrysippus did so when he reduced the *πάθη* to *κρίσεις*.

<sup>127</sup> The chief proof is that of Zenon. *Galen. ib. ii. p. 98.* *φωνή διὰ φάρυγγος χωρεῖ. εἰ δὲ ἦν ἀπὸ τοῦ ἐγκεφάλου χωροῦσα, οὐκ ἂν διὰ φάρυγγος ἐχώρει. ὅθεν δὲ λόγος, καὶ φωνὴ ἐκεῖθεν χωρεῖ. λόγος δὲ ἀπὸ διανοίας χωρεῖ, ὥστ' οὐκ ἐν τῷ ἐγκεφάλῳ ἐστὶν ἡ διάνοια.* Galen several times reproaches the Stoics with ignorance of anatomy, which indeed Chrysippus admitted. *Ib. i. p. 80 ; ii. p. 91.*

them to the diffusion of a living breath throughout the members; like the many feet which issue from the polypus, so the other seven parts of the soul proceed from the ruling portion, and extend themselves into the whole body as a warm breath.<sup>128</sup> This Stoical division of the soul is distinguished from all similar ones by the number of the parts which it admitted; but it is evident that, agreeably to the principle on which it proceeded, the number might have been still considerably enlarged.

The question of freewill having once been started, the Stoics could not neglect to notice it, the less so as they had particular reasons to defend their theory against the objection that its doctrine of necessity was destructive of all freedom of will. They must naturally reject the Epicurean hypothesis of a capricious determination of the soul. Against the argument by which it was attempted to be supported, drawn from the equivalence of opposite motives, Chrysippus maintained that such equiponderance is only apparent, and that in such cases the motive which strikes the balance is merely unperceived.<sup>129</sup> That there is neither chance nor caprice, for that what is called chance is the regular effect of some cause unknown to and

<sup>128</sup> Diog. Laert. vii. 157; Plut. de Pl. Ph. iv. 4, 21. *οἱ Στωικοὶ φασιν εἶναι τῆς ψυχῆς ἀνώτατον μέρος τὸ ἡγεμονικόν, τὸ ποιοῦν τὰς φαντασίας καὶ τὰς συγκαταθέσεις καὶ αἰσθήσεις καὶ ὁρμάς· καὶ τοῦτο λογισμὸν καλοῦσιν· ἀπὸ δὲ τοῦ ἡγεμονικοῦ ἑπτὰ μέρη εἰσὶ τῆς ψυχῆς ἐκπεφυκότες καὶ ἐκτεινόμενα εἰς τὸ σῶμα, καθάπερ αἱ ἀπὸ τοῦ πολύποδος πλεκτάναι, κ. τ. λ.* Parts of the soul are, according to Chrysippus, that by which the soul has reason, λόγος. Galen. ib. v. p. 160.

<sup>129</sup> Plut. de Stoic. Rep. 23. The doctrine which Chrysippus here opposes is presented by Plutarch in a manner exactly similar to the modern theory of Indifference of the Will. Cic. de Fato, 10.



untraceable by the human intellect.<sup>130</sup> By freedom of the soul, on the other hand, the Stoics understood simply that assent which it gives to certain ideas, and which is not given arbitrarily, but in agreement with the nature of the individual soul.<sup>131</sup> This opinion rested upon two positions which we have already examined ; one is, that all human representations are indeed excited in us by certain external relations of nature, but that a single representation by itself does not constitute a thought, but that to affect thought, the assent or concurrence which we give to representations must be added thereto ; the other is, that the will and the desire are one with thought, and may be resolved into it. Now when the Stoics rejected the doctrine of the necessity of human volitions and actions, they must have understood thereby merely an external necessity. Those representations which the external necessity of impressions excite within us, are far from constraining our assent and will ; on the contrary, these are the results of our proper natures, and are founded on the internal necessity of our propensities. At the same time, the Stoics did not scruple to avow that our nature and our propensities are forced upon us by the necessity of a universal fate, and that thereupon we will and act agreeably to our natural dispositions, in the same manner as the stone which is rolling down a mountain side must have its first impulsion from without, while the length of its course depends on its

<sup>130</sup> Plut. de Pl. Ph. i. 29.

<sup>131</sup> Plut. de Stoic. Rep. 47.

weight and figure.<sup>132</sup> Consequently, the liberty of things is their internal law; but the law of individuals is dependent upon the universal nature of all. Now the more that the individual is hereby made subject to the universal, the more did the Stoics attempt to show that the individual nature is nevertheless comprised in the universal, and that consequently the two reciprocally condition one another. This, in general, is perfectly consistent with their mode of always regarding the individual as in a certain opposition to the universal, and refusing to allow it to appear as purely passive in relation to the whole. On the contrary, they thought that the more perfect the individual being, the more active it is, and acquires a power of even modifying the whole in the universal enchainment of causes. This mode of view may be traced in the singular paradox of Chrysippus, that the sage is not less useful to Zeus than Zeus is to the sage.<sup>133</sup>

<sup>132</sup> Gell. vi. 2. Sicut, inquit (sc. Chrysippus), lapidem cylindrum si per spatia terræ prona atque diruta jacias, causam quidem ei et initium præcipientiæ feceris, mox tamen ille præceps volvitur, non quia tu id jam facis, sed quoniam ita sese modus ejus et formæ volubilitas habet; sic ordo et ratio et necessitas fati genera ipsa et principia causarum movet, impetus vero consiliorum mentiumque nostrarum actiones ipsas voluntas cujusque propria et animorum ingenia moderantur. Cic. de Fato, 18.

<sup>133</sup> Plut. adv. Stoic. 33. ἀρετῇ τε γὰρ οὐχ ὑπερίχειν τὸν Δία τοῦ Δίωτος, ὀφελεῖσθαι τε ὁμοίως ὑπ' ἀλλήλων τὸν Δία καὶ τὸν Δίωνα σόφους ὄντας, ὅταν ἕτερος θατίρου τυγχάνη κινουμένου.

## CHAPTER V.

### THE ETHICS OF THE STOICS.

THE ethics and physics of the Stoics are intimately allied to each other. For this reason Chrysippus declared that it is impossible to discover any other foundation and origin of justice than Zeus and the universal nature; and that whoever would wish to treat of good and evil, virtue and happiness, must commence with universal nature, and the wise disposition of things; nay more, he is even of opinion that without the study of physics it is impossible to distinguish between good and evil;<sup>1</sup> for a virtuous life is merely a life agreeable to our experience of what is going on in nature, since the human is a part of the universal nature.<sup>2</sup> It is thus that the Stoical ethics attached itself to the most general and most sublimé principles of their physiology. A further point of connection between them is furnished by the notion of propensity; for the Stoics agreed with Aristotle in founding all virtue on instinct, which they destined to be a physical property of animals,—a motion towards something

<sup>1</sup> Plut. de Stoic. Rep. 9. δεῖ γὰρ τοῦτοις συνάψαι τὸν περὶ ἀγαθῶν καὶ κακῶν λόγον, οὐκ οὕσης ἄλλης ἀρχῆς αὐτῶν ἀμείνωνος, οὐδ' ἀναφορᾶς, οὐδ' ἄλλου τινὸς ἔνεκεν τῆς φυσικῆς θεωρίας παραληπτῆς οὕσης ἢ πρὸς τὴν περὶ ἀγαθῶν ἢ κακῶν διάστασιν.

<sup>2</sup> Diog. Laert. vii. 87. πάλιν δ' ἴσον ἐστὶ τὸ κατ' ἀρετὴν ζῆν τῷ κατ' ἐμπειρίαν τῶν φύσει συμβαινόντων ζῆν, ὥς φησι Χρύσιππος. — μέρη γὰρ εἰσιν αἱ ἡμέτεραι φύσεις τῆς τοῦ ὅλου. Cic. de Fin. iii. 9.

which exists naturally and necessarily in the soul.<sup>3</sup> The Stoical ethics is not altogether independent of their logic, but the connection between them is much slighter than that between ethics and physics; it is only mediate, being confined to the influence which logic exercises on ethics by contributing to a right knowledge of physics. The instinct of man differs from that of irrational animals in this, that the former develops itself agreeably to reason, and with consciousness;—or in this, that in man the reason must form and mould the instinct.<sup>4</sup> This instinct in man is simply the assent which he gives to a particular representation, or, what in spirit is the same, the idea of good determines it to action.<sup>5</sup> It was only natural to expect to meet with the Stoics in this direction, since they completely reduced all desire into knowledge, following therein a view which was common, more or less, to all the Socratical schools.

Founded on these physical and logical principles, the moral theory of the Stoics is, in its general features, extremely simple, and owes all its complexity to the mass of accessory matters which have been mixed up with it. When Chrysippus declared that all opinions upon good and evil must have their commencement in Zeus and universal nature, in all probability he merely intended to in-

<sup>3</sup> Stob. Ecl. ii. p. 94, 108, 116, 160; Diog. Laert. vii. 86. τοῖς ζῴοις — τῷ κατὰ φύσιν τὸ κατὰ τὴν ὁρμὴν διοικεῖσθαι.

<sup>4</sup> Diog. Laert. vii. 85. It is naturally only in rational creatures that the soul strives after συνειδήσις. Ib. 86. τεχνίτης γὰρ οὗτος (sc. ὁ λόγος) ἐκτελεῖται τῆς ὁρμῆς.

<sup>5</sup> Stob. Ecl. ii. p. 160, 164. πάσας δὲ τὰς ὁρμὰς συγκαταθίσεις εἶναι· τὰς δὲ πρακτικὰς (sc. συγκαταθίσεις) καὶ τὸ κινητικὸν περιέχειν.

timate that the fundamental axioms of morals, and the elements of its development, must be drawn from the first principles of physics. Accordingly, our exposition of their ethical theory must also start from this point.<sup>6</sup> Now, as the Stoics made the whole world to be subject to a universal law, they must have considered it necessary that every part of the world should submit to it. Accordingly, the ultimate principle of their moral theory is, Follow nature, or live in unison with nature.<sup>7</sup> This precept, however, is somewhat ambiguous until it is determined what they understood by the term nature. First of all, it may be asked, is it universal nature, or the particular nature of man, that is here intended? Now, as to the former, it could most assuredly be excluded, if it be true that every general consideration of morals must commence with a knowledge of Zeus and universal nature. Accordingly, Cleanthes taught that man must follow universal and not his special nature; while Chrysippus, on the contrary, understood by the nature which must be followed, both the human and the universal.<sup>8</sup> This difference may perhaps have

<sup>6</sup> The divisions of the Stoical ethics in Diog. Laert. vii. 84, and in Senec. Ep. 89 do not agree, in the order of the parts at least. Petersen, p. 260, note, remarks that the division of Cicero, de Off. ii. 5, Etenim virtus omnis tribus in rebus fere vertitur, etc., agrees with that of Seneca. Still it would be hardly possible, from this fact, to draw a satisfactory and coherent exposition of the moral theory of the Stoics.

<sup>7</sup> Diog. Laert. vii. 87. *πρῶτος ὁ Ζήνων — τέλος εἶπε τὸ ὁμολογουμένως τῇ φύσει ζῆν.* According to Stob. Ecl. ii. p. 132, 134, Zeno merely said, *ὁμολογουμένως ζῆν*: but this elliptical form was completed by Cleanthes and most of the Stoics by the addition of *τῇ φύσει*. Several other formulæ, in the same sense, were used by the Stoics.

<sup>8</sup> Diog. Laert. vii. 89. *φύσιν δὲ Χρύσιππος μὲν ἑξακούει, ἣ ἀκολουθῶς δὲ ζῆν, τὴν τε κοινὴν καὶ ἰδίως τὴν ἀνθρωπίνην. ὁ δὲ Κλεάνθης τὴν κοι-*

been unessential ; for it must be remembered that according to the Stoical view, every special nature is grounded on the universal, and that the special nature of man, in its essence, consists in that reason which rules itself in obedience to its knowledge of the universal law. But this disagreement is connected with two other points of difference, which materially modify the sense of this precept, at least, in its application to practice. In order rightly to comprehend these differences, it is necessary to bear in mind that the Stoics did in a manner recognise a difference between individual and universal nature. Now in their ethical theory they were especially forced to observe this distinction, since without it, it would have been impossible for them to account for the existence of evil. Now, on the supposition that there does exist such an opposition between the natures of the individual and of the universe, the life agreeable to nature must mean one in which all the elements of individual life are in perfect harmony.<sup>9</sup> It was in this sense that Chrysippus understood the position, when he defined a virtuous life as an agreement with the innate judgment of man as to good and evil ;<sup>10</sup> and with it alone can we reconcile a number of Stoical precepts which limit the moral life to the person of the individual, and make it independent of all ex-

*νήν μόνην ἐκδέχεται φύσιν, ἣ ἀκολουθεῖν δεῖ, οὐκέτι δὲ καὶ τὴν ἐπὶ μέρος.*  
This seems to be the ground of that strict acceptance of the Stoical ethics which we meet with in the formulæ of Cleanthes.

<sup>9</sup> Stob. Ecl. ii. p. 132. τὸ ὁμολογουμένως ζῆν. τοῦτο δ' ἴστι καθ' ἕνα λόγον καὶ σύμφωνον ζῆν, ὡς τῶν μαχομένων ζήων κακοδαιμονούντων.  
Senec. Ep. 89. Vita sibi concors.

<sup>10</sup> Plut. de Stoic. Rep. 17.

ternal circumstances.<sup>11</sup> For, in fact, such precepts make the required harmony of individual life to be an agreement with itself, and not with the natural development of the whole universe. It is clear that this acceptance of their ground-principle was forced upon the Stoics by the impossibility of distinctly expressing, in any moral precept soever, that law of universal nature which man ought to follow. But this distinction has given rise to another. For the human nature, in conformity with which we are to live, is partly rational and partly animal, and the unity of these two may be dissolved. Conformably indeed to the general precept, we ought to preserve a perpetual peace between these two conflicting elements of our nature; but who will guarantee the maintenance of such a peace?

The Stoics were, it is true, on the whole, disposed to reduce everything to reason, which constitutes the ruling force even of the animal principle;<sup>12</sup> nevertheless, experience forced upon them the admission that by the abuse of reason, or by the unnatural tendency of his passions, man may disturb and corrupt the natural relations of life; and that, consequently, it is advisable to remount to a simple state of humanity, in which man is not constrained by custom, habitual circumstances, or arbitrary conventions. In this respect they adopted as a model, that mere animal state of life which is

<sup>11</sup> Diog. Laert. vii. 89. *ἐν αὐτῇ τε* (sc. τῇ ψυχῇ) *εἶναι τὴν εὐδαιμονίαν, ὥστε οὕτω ψυχῇ πεποιημένη πρὸς τὴν ὁμολογίαν παντὸς τοῦ βίου.* Plut. de Stoic. Rep. 20.

<sup>12</sup> Cic. de Fin. iv. 11. Chrysippus — *summum bonum sed constituit, non ut excellere animo, sed ut nihil esse præter animum videretur* (sc. homo).

not, as yet, perverted by such vanities, and seduced from the simple course of nature ; and hesitated not to recommend an imitation of the Cynics, and to hold up the animal as a model to the man.<sup>13</sup> In this interpretation of the term ‘ nature,’ the Stoics closely approximated to that usage of it in modern theories which insists upon the state of nature being the standard of human life ; but we must not forget that this was a modification, and not the original signification of the term in the fundamental principle of the Stoical ethics.

In short, we must confess, that by these distinctions the Stoical principle gradually abandoned its most extensive and general signification for one more and more limited. At first we are enjoined to live conformably to universal nature, then to our particular human nature; lastly, agreeably to our rational nature, so far as it has not become artificial and corrupt, but still maintains its natural simplicity. Now, in the first place, if we consider the more extensive precept, we shall be at no loss to discover why it received these successive restrictions. For when we ask wherein consists that universal law of nature agreeably to which men ought to live, the only answer that can be given is at best extremely vague. Nature tends in general towards the most perfect development of life, such as will eventually be realised in the mundane conflagration ; to promote this development, therefore,—to co-operate, as much as lies

<sup>13</sup> Plut. de Stoic. Rep. 22. καὶ πρὸς τὰ θηρία φησὶ (sc. Χρύσιππος) δεῖν ἀποβλέπειν καὶ τοῖς ὑπ’ ἐκείνων γινομένοις τεκμαίρεσθαι τὸ μηδὲν ἄτοπον μηδὲ παρὰ φύσιν εἶναι τῶν τοιούτων.



in our power, in its consummation, ought to be the end of all our exertions in life. The conformity of all special natures with the universal must consist in their tendency towards the general end of all. But by what means is this tendency to be insured? Apparently by no other than by considering the evolution of the universal life-principle in all individual natures as at the same time a development of life in the whole. In this sense it appears to have been understood by Chrysippus, when he taught that even an irrational life is better than not to live; for the bad is better than that which is neither good nor bad; not indeed the bad absolutely, but the rational ground which acts in the production of evil and pervades all entity in the world.<sup>14</sup> This view announces to our minds the conviction that all actions are governed by a universal law, and contribute to its consummation. However vague this doctrine may be, as rendering it impossible to make any distinction between a good and evil life, it nevertheless forms a leading feature of the Stoical view. For by it the individual is made entirely subordinate to the universal, while every personal end is excluded; and inasmuch as, agreeably to their physical theory, the end of life lies in its most active development, the Stoical doctrine necessarily set itself in direct opposition to all such modes of view as made good to consist not in activity but in

<sup>14</sup> Plut. de Stoic. Rep. 14, 18. λυσιτελεῖ ζῆν ἄφρονα μᾶλλον, ἢ μὴ βιοῦν, κἂν μηδὲποτε μέλλῃ φρονήσῃν' — τοιαῦτα γὰρ τάγαθὰ ἔστι τοῖς ἀνθρώποις, ὥστε τρόπον τινὰ τὰ κακὰ τῶν ἀνὰ μίσον προτερεῖν. — ἔστι δ' οὐ ταῦτα προτεροῦντα, ἀλλ' ὁ λόγος, μεθ' οὗ βιοῦν ἐπιβάλλει μᾶλλον, καὶ εἰ ἄφρονες ἰσόμεθα. Cf. adv. Stoic. 12.

calm enjoyment.<sup>15</sup> The happiness which all in the world pursues is, according to the Stoics, nothing less than a free unimpeded course of nature; while, on the contrary, they regarded the pleasure which is sought to be derived from an abandonment of active duties, as a hinderance of life and an evil.<sup>16</sup> Indeed, of pleasure in general, Cleanthes maintained that it is neither agreeable to, nor the end of nature;<sup>17</sup> and even if, from a different point of view, other Stoics admitted that it is both natural, and, in a manner, good, this they did from a consideration, not of its moral import, but of its origin; for they invariably maintained that it is without moral value, and that it is not an end of nature,<sup>18</sup> but merely an aftergrowth, as it were, (*ἐπιγεννημα*,) a something necessary to the proper unimpeded activity of individual life;<sup>19</sup> not an activity, but a passive state of the soul.<sup>20</sup> This constitutes the severe and rigorous principle of their moral theory; all that is purely personal is rejected by it; every reference of action to any outward work or object is foreign to morality; the work is merely an accessory result, contemporaneous with the good; wise conduct is alone a good.<sup>21</sup> The Stoics are the most decided opponents of all con-

<sup>15</sup> Stob. Ecl. ii. p. 138; Diog. Laert. vii. 88; Sext. Emp. Pyrrh. Hyp. iii. 172. *εὐδαιμονία δὲ ἴστιν, ὡς οἱ Στωικοὶ φασι, εὐροια βίου.*

<sup>16</sup> Cleanth. Hymn. 29.

<sup>17</sup> Sext. Emp. adv. Math. xi. 73.

<sup>18</sup> L. l.; Chrys. ap. Plut. de Stoic. Rep. 15; adv. Stoic. 25.

<sup>19</sup> Diog. Laert. vii. 85, 86. *ἐπιγεννημα γάρ φασιν, εἰ ἄρα ἴστιν, ἡδονὴν εἶναι. ὅταν αὐτὴν καθ' αὐτὴν ἢ φύσις ἐπιζητήσασα τὰ ἐναρμόζοντα τῇ συστάσει ἀπολάβῃ.* Ib. 103.

<sup>20</sup> Cic. de Fin. iii. 10; Diog. Laert. vii. 110; Stob. Ecl. ii. p. 166.

<sup>21</sup> Cic. de Fin. iii. 9.

sideration of works or consequences, as well as of external advantages; even health, and a good habit of body, fall not within their scope of moral consideration. The right volition alone decides whether a matter is to be pursued or not;<sup>22</sup> virtue alone is good;<sup>23</sup> it alone is all-sufficient for happiness;<sup>24</sup> it alone is truly useful; and the evil man who is without virtue is poor even amidst the greatest riches; whereas the good man wants nothing, since he possesses all that can truly profit him.<sup>25</sup>

But it is evident that this general precept to follow in all things the law of nature is incapable of furnishing any particular rules for the moral guidance of life. Before a system of particular laws of morality could be drawn from it, it must first have been shown what the general law of nature re-

<sup>22</sup> Cleanth. ap. Senec. de Benef. vi. 11.

<sup>23</sup> Cic. Ac. i. 10. Zeno igitur nullo modo is erat, qui, ut Theophrastus, nervos virtutis inciderit, sed contra qui omnia, quæ ad beatam vitam pertinerent, in una virtute poneret nec quidquam aliud numeraret in bonis. Contrariwise, Stob. Ecl. ii. p. 92. τῶν δ' ἀγαθῶν τὰ μὲν εἶναι ἀρετὰς, τὰ δ' οὐ φρόνησιν μὲν οὖν καὶ σωφροσύνην καὶ ἀνδρείαν ἀρετὰς, χαρὰν δὲ καὶ εὐφροσύνην καὶ θάρος καὶ βούλησιν καὶ τὰ παραπλήσια οὐκ εἶναι ἀρετὰς. This apparent contradiction results in a difference of phraseology in the Stoical schools, for according to Cic. de Fin. iii. 10, they gave various definitions of the good. He gives the definition of Diogenes of Babylon: Ego assentior Diogeni, qui bonum definierit id, quod esset natura absolutum. Id autem sequens illud etiam, quod prodesset, (ὠφέλημα enim sic appellemus) motum et statum esse e natura absoluto (absoluti?). It is clear that those kinds of good which are without a virtue are comprised in this last notion of a motus et status e natura absoluti, and therefore are good merely in a subordinate sense. Cf. Stob. Ecl. ii. p. 136. As to ὠφέλημα compare ib. p. 140. Connected with this are a variety of subtle distinctions, for instance, that given above between ἀπειρόν and ἀπειρίον, of which we shall speak hereafter. The second mode of determining the idea of good indicates a milder acceptance of the Stoical principle.

<sup>24</sup> Diog. Laert. vii. 102, 127; Stob. Ecl. ii. p. 90.

<sup>25</sup> Diog. Laert. vii. 104; Cic. de Fin. iii. 10; Plut. de Stoic. Rep. 12; adv. Stoic. 20; Senec. Ep. 9.

quires of individuals in every possible combination of circumstances. But as this was impracticable, the Stoics had no other resource than to determine the nature of the individual being, which must be regarded as the law to be followed, since universal nature has impressed its will on the individual. Hereby, however, the Stoical doctrine assumed a different character. It was of necessity rigorous and severe, while it enjoined on man to follow, unconditionally, universal nature, which spares not individual things, but destroys as well as produces, and which makes use of individuals merely as means to the attainment of its end. The stern command of such a principle was,—willingly submit to a destiny, to which the wicked must involuntarily submit.<sup>56</sup> When, however, a consideration was paid to individual nature, then the rigour of the precept was somewhat abated; a regard to self, in action, became allowable, and the main point was to ascertain the instincts and impulses which nature had implanted in man. Setting out from this point of view it was impossible to look for a complete forgetfulness of self, since no natural impulse of individual nature demands such a sacrifice. Accordingly, in this respect, the Stoics were content with demanding the rejection of all superfluities, and with reducing man to the simplest wants of life. By this procedure, however, a certain degree of selfishness necessarily found a place in their

<sup>56</sup> Cleanthes the Stoic of Mohnike. Fragment 1.

*ἄγου δέ μ', ὦ Ζεῦ, καὶ σὺ γ', ἡ Πεπρωμένη,  
ὅποι ποθ' ὑμῖν εἰμι διατεταγμένος,  
ὥς ἔψομαί γ' ἄοκνος· ἦν δέ μὴ θέλω  
κακὸς γενόμενος, οὐδὲν ἥττον ἔψομαι.*

theory. The first instinct of all beings is self-preservation: which is conformable to nature herself,<sup>27</sup> and consequently it is only natural that a due regard should be paid to all conditions indispensable to the life of the individual. Self-love, therefore, is the foundation of moral action; not, indeed, the love of one's own pleasures, but of existence, or rather of activity, wherein life consists. This involves also the desire to maintain the health and soundness of the body, as well as to arrive at self-consciousness and a knowledge of things, towards which nature strongly impels man.<sup>28</sup> These objects constitute what the Stoics called the first things according to nature (*τὰ πρῶτα κατὰ φύσιν*), in opposition to which were the first things contrary to nature, such as disease, weakness, deformity, and the like.<sup>29</sup> Now the first things according to nature have a worth of their own (*ἀξία*), and so likewise has whatever is either connected with them, or of use in securing them. Accordingly, Chrysippus declared that none but a madman would deny the value of riches, health, and the like.<sup>30</sup>

Now while the Stoics here appear to admit that there are other good things beside the will and the act, they involved themselves apparently in a contradiction between the subordinate speculations and the supreme principle of their system. To get rid of this appearance of inconsistency they had recourse to an ingenious distinction between the

<sup>27</sup> Diog. Laert. vii. 85. τὴν δὲ πρῶτην ὁρμήν φασὶ τὸ ζῶον ἰσχυρὸν ἐπὶ τὸ τηρεῖν ἑαυτόν. Cic. de Fin. iii. 5; iv. 10; v. 9.

<sup>28</sup> Cic. de Fin. iii. 5.

<sup>29</sup> Cic. l. l.; Stob. Ecl. ii. p. 144, 148; Gell. xii. 5.

<sup>30</sup> Plut. de Stoic. Rep. 30.

good and the preferable (*προηγμένον*). The action, as an act, is good, but not the object which it has in view.<sup>31</sup> They maintained, that all to which human choice directs itself is in general without value for man; <sup>32</sup> health, riches, and the like, have no value absolutely; they may be made subservient either to good or to evil; consequently they belong to those things which in themselves are indifferent, the want of which, in fine, has no influence on the happiness of the virtuous individual; <sup>33</sup> virtuous actions belong, under all circumstances, to the virtuous man; the manner of his being virtuous is no doubt dependent on circumstances, but this does not constitute his happiness, and consequently it cannot be a necessary element of good.<sup>34</sup> But while the Stoics described the special objects of actions to be indifferent in themselves, they yet admitted a distinction between indifferent things. Some, they said, have little if any value, and do not influence the desires, being of no more importance either way than the bending or straightening the finger, or the spending this or that drachma; others, on the contrary, are capable of exciting a desire, since they contribute to the life agreeable to nature, and these are the indifferent things which deserve a preference to others.<sup>35</sup> Thus the

<sup>31</sup> Plut. adv. Stoic. 26.

<sup>32</sup> Plut. de Stoic. Rep. l. i. οὐδὲν εἶναι φησι (sc. Χρύσιππος) τούτων καθόλου πρὸς ἡμᾶς.

<sup>33</sup> L. i.; ib. c. 31.

<sup>34</sup> Stob. ii. p. 94. ἔτι δὲ τῶν ἀγαθῶν τὰ μὲν πᾶσι τοῖς φρονίμοις ὑπάρχειν καὶ ἀεί, τὰ δ' οὐ. ἀρετὴν μὲν οὖν πᾶσαν καὶ φρονίμην αἰσθησιν καὶ φρονίμην ὁρμὴν καὶ τὰ ὅμοια πᾶσι τοῖς φρονίμοις ὑπάρχειν καὶ ἐν παντὶ καιρῷ· χάραν δὲ καὶ εὐφροσύνην καὶ φρονίμην περιπάτησιν οὕτε πᾶσι τοῖς φρονίμοις ὑπάρχειν οὐτ' ἀεί.

<sup>35</sup> Plut. de Stoic. Rep. 23; Diog. Laert. vii. 104, 105.

sage, whenever he has a choice between health and wealth, or sickness and poverty, prefers the former; and in this choice he is influenced by a rational ground, even though he does not regard them as things of good, for they are not the sovereign good, in comparison with which all else must be despised; he esteems them less than virtuous action, for the preferable only reaches to a certain degree of good.<sup>36</sup> This distinction of the Stoics between the good and the preferable clearly proves that their object was to take the idea of good in its very highest sense, to the exclusion of what is merely relative. In this they showed themselves faithful to their more rigorous view; the preferable indicates a merely special good; and agreeably to the general character of their theory, they must despise the particular in comparison with the universal.

But we must not allow ourselves to be deceived by words. It is evident that the Stoics remitted greatly the rigour of their system when they not only permitted but even required that, in the calculation of human life, an account of the preferable should be taken. Where they refused to give the name of good to corporeal and external advantages,

<sup>36</sup> Stob. Ecl. ii. p. 144 sqq.; p. 156. τὰ μὲν οὖν πολλὰ ἔχοντα ἀξίαν προηγμένα λέγεσθαι. — προηγμένον δ' εἶναι λήγουσιν, ὃ ἀδιάφορον ὃν ἐκλεγόμεθα κατὰ προηγούμενον λόγον. — οὐδὲν δὲ τῶν ἀγαθῶν εἶναι προηγμένον διὰ τὸ τὴν μεγίστην ἀξίαν αὐτὰ ἔχειν. τὸ δὲ προηγμένον τὴν δευτέραν χώραν καὶ ἀξίαν ἔχον συνεγγίζειν πῶς τῇ τῶν ἀγαθῶν φύσει. According to Diog. Laert. vii. 105, however, everything that has any value soever is a προηγμένον. This is an unimportant deviation. Plut. de Stoic. Rep. 30; Cic. de Fin. iii. 15, 16. According to the above passage of Plutarch, Chrysippus admitted that the προηγμένον might in a certain sense be called a good, and even Zeno did not place it among the ἀδιάφορα.

they were only looking to the undoubted truth that they cannot be regarded as the supreme good, or as a good in and by themselves. This truth, however, is far from being implied in their idea of a life agreeable to nature, when it is taken in its secondary and restricted sense; but it was suggested by the habit of the Stoics to draw too marked a distinction between the special and the universal, as well as between the work and the means on the one hand, and the activity on the other. On the other hand, this second interpretation of their fundamental principle led to another, which ultimately coincides with the extreme rigour of the first. If every being ought to live conformably to his nature, and to strive to preserve it in all its extent and perfection, it becomes important to determine what this nature is. To answer this question the Stoics brought forward the idea of the fundamental composition (*σύστασις*); and on this depends the life agreeable to nature, and by this we must determine the true essence of the individual. By this term they understood the ruling portion of the soul considered in its relations to the other parts of the soul and to the body.<sup>37</sup> It is only in man that this fundamental composition is rational;<sup>38</sup> for we saw that all the other parts of the human soul are ruled by the reason, when diffused in and through them as its organs; and that even the passions of the soul were regarded by the Stoics as a perverted

<sup>37</sup> Diog. Laert. vii. 85; Senec. Ep. 121. *Constitutio est principale animi quodammodo se habens erga corpus.* Cf. Stob. Ecl. i. p. 312 sq.

<sup>38</sup> Senec. l. l. *hominis autem constitutionem rationalem esse.*



and unnatural reason, arising either from an excess or misdirection of the rational instinct.<sup>39</sup> On this account, they considered it to be a problem of human life, to establish throughout the supremacy of reason; this is the nature of man, which it is the law of his being to follow. All lower grades of the improvement of humanity, such as youth, in which reason is not as yet fully developed, notwithstanding that they proceed duly and naturally, are to be looked upon as the means to a higher, and not as in themselves good; they are designed to bring about a rational intelligence, in which that true life of man, which is agreeable to his nature, consists.<sup>40</sup> In this train of thought the leading view is, that the true nature is essentially nothing less than reason.<sup>41</sup>

That herein the moral theory of the Stoics resumes its severe character, may be proved by several of the positions which follow therefrom. In the first place, it follows from it as a general consequence, that it is not every natural endeavour of the individual that possesses a moral worth, but that those which proceed from a pure rational impulse are merely suffered so far as they afford a basis for nobler endeavours, and are the means by which the reason works. In the second place, this doctrine is employed to support the particular view which we previously met with in Aristotle, that there is a fixed period in human life when the moral training of the man awakens the reason,

<sup>39</sup> Diog. Laert. vii. 110; Stob. Ecl. ii. p. 36, 166; Cic. Tusc. iv. 6; Galen. de Hipp. et Plat. Plac. iv. p. 135 f.

<sup>40</sup> Cic. de Fin. iii. 6, 7.

<sup>41</sup> Ib. iv. 11.

which thereupon becomes the guide of the moral impulses. The Stoics, accustomed with a certain rigour of consequence, to work out every principle to its extreme result, carried to the greatest height this opposition between the sensuous and the rational life of man, which even in Aristotle appears to be too marked and decided. Reason, they taught, is either awakened in man, and consequently takes the rule over him, or else not, and then man is the creature of his passions. In the former case, he is a good man, in the latter he is evil; there is no intermediate case between the two, for there is no mean between virtue and vice.<sup>42</sup> Thus were the Stoics disposed, in their estimate of human character, to find all black or all white. Such a course must be regarded as a necessary consequence of this, that deriving good solely from rational intelligence, they made the impulse of the intelligent to be a result simply of his intelligence. On this account, too, they maintained, unconditionally, that the true, the moral, virtue is teachable,<sup>43</sup> and that all virtues must of necessity be united together, since they all are grounded in the science of that which is to be done; and that the willing of good is inseparable from the knowledge of it.<sup>44</sup> This, too, is the source of their holding that all good actions are equally good, and all evil equally evil, because the latter are the results simply of the passions of the soul, the former of the perfect li-

<sup>42</sup> Stob. Ecl. ii. p. 198; Diog. Laert. vii. 101 sqq. But this doctrine is taken in a milder sense. Stob. Ecl. ii. p. 92, 98 sqq.; 124 sqq.

<sup>43</sup> Diog. Laert. vii. 91.

<sup>44</sup> Ib. 125; Stob. Ecl. ii. p. 110 sqq.; Plut. de Stoic. Rep. 27.

berty of the reason; and, lastly, that whoever has once attained to virtue, possesses it wholly and completely, working with all the force of reason, which, having once acquired it, he can never again lose.<sup>45</sup> It is obvious that these are positions which could never have been taken up except by a theory of morals which views the human reason apart from all the natural conditions which alone render its improvement and development possible, and seeks only to seize the general idea of the reason, divested of all particular relations. Such a view, however, has rendered the ethical doctrine of the Stoics as barren as it is severe. This last ground of severity is closely allied to the first. For when the Stoics taught that without regard to sensuous motives, man must invariably follow reason, they understood by reason nothing else than the pure insight into the course of nature, which governs all, and the fixed determination, taken once for all, to live conformably to the universal law, and to sacrifice thereto all selfish desires of gratification. Accordingly, they observed, with truth, that reason unites all, since good men are attracted together by friendship and love; whereas the bad live always

<sup>45</sup> Stob. Ecl. ii. p. 196 sq. πάντα δὲ τὸν ἀγαθὸν καὶ καλὸν ἄνδρα τέλειον εἶναι λέγουσι διὰ τὸ μηδεμιᾶς ἀπολείπεισθαι ἀρετῆς. — δύο γίνη τῶν ἀνθρώπων εἶναι, τὸ μὲν τῶν σπουδαίων, τὸ δὲ τῶν φαύλων· καὶ τὸ μὲν τῶν σπουδαίων διὰ παντὸς τοῦ βίου χρῆσθαι ταῖς ἀρεταῖς κ. τ. λ. Ib. p. 218 f.; Diog. Laert. vii. 120, 127, 128; Plut. de Stoic. Rep. 13; adv. Stoic. 7. But the Stoics were not unanimous whether or not virtue, i. e. reason, might be lost or not. Chrysippus admitted that in certain great bodily sufferings we are not masters of our reason. Diog. Laert. vii. 127; Simpl. Cat. fol. 102 a; Plut. de Stoic. Rep. 27. In itself, therefore, he considered the force of reason to be too great to be lost without some strong external cause.

in discord.<sup>46</sup> This view is forcibly expressed in Zeno's sketch of the ideal of a state in which men should live together without distinction of race or nation, and without difference of laws; and there should be one life and one order, as it were of a herd feeding together in a common pasture.<sup>47</sup>

Such are the general principles of the moral theory of the Stoics, in which it is easy to distinguish two opposite directions, the one tending to the universal, while the other is disposed to content itself with the particular. The latter, however, plays at best but a very subordinate part. All moral action must be in harmony with nature in general; with the supreme law of destiny, or of God. The rational insight of the individual, which in truth constitutes his proper nature, has no other object than to recognise this universal law as the true rule of its actions. There is in all this a magnanimous self-denial, which is still more strongly expressed by its requiring a constant and unceasing exertion of power, on the ground that this is what constitutes the universal life of the world and its highest perfection. We must here further observe, in order to render our subsequent remarks intelligible, that the Stoics, having adopted the Socratic principle that becoming and motion cannot be regarded as the end of things, found themselves con-

<sup>46</sup> Stob. Ecl. ii. p. 204; Diog. Laert. vii. 123, 124; Cic. de Fin. iii. 19, 20.

<sup>47</sup> Plut. de Alex. Fort. i. 6. καὶ μὴν ἡ πολὺ θαυματομένη πολιτεία τοῦ τὴν Στωικὴν αἵρεσιν καταβαλομένου Ζήνωνος εἰς τὸν τοῦτο συντείνει κεφάλαιον, ἵνα μὴ κατὰ πόλεις μηδὲ κατὰ δήμους οἰκῶμεν, ἰδίῳις ἕκαστοι διωρισμένοι δίκαιοις, ἀλλὰ πάντας ἀνθρώπους ἡγώμεθα δημότας καὶ πολίτας, εἴς δὲ βίος ἢ καὶ κόσμος ὥσπερ ἀγέλης συννόμου νόμῳ κοινῷ τρεφομένης.

strained to admit that it is not the activity or motion itself of life, but that vital energy which is acquired by, and is the end of it, that constitutes the supreme good. This admission lies at the ground of their distinction between a virtuous activity and virtue itself, of which the latter alone is to be regarded as the supreme end of action: whereas it is only in a subordinate sense that the former can be called an end, in so far, that is, as it is inseparably allied to virtue.<sup>48</sup> By this distinction, all action, as a special work of virtue, is separated from the universal and true good of the soul, and considered in the light of a mean, and not as an end; in such a manner that this distinction tends to augment the rigour and severity of the moral theory of the Stoics. But the more exclusive their doctrine thus became in its tendency to the universal, the more difficult must it have been to establish thereby any detailed system of moral precepts. And, in fact, the attempt of the Stoics in this respect was far from being completely successful; and, moreover, the mean which they employed is devoid of anything like a scientific connection of the universal and the particular. This mean was furnished by the idea of the preferable (*προηγμένον*), which they employed to indicate whatever, in certain relations, excites desire in the special nature of a rational being, without, however, being in general truly desirable or a true good. Herein we

<sup>48</sup> Hereto refers the difference between *ἀπὸ τοῦ* and *ἀπὸ τοῦ*. Stob. Ecl. ii. p. 140, 196. τὴν γὰρ φρόνησιν αἰρούμεθα ἔχειν καὶ τὴν σωφροσύνην· οὐ μὰ Δία τὸ φρονεῖν καὶ σωφρονεῖν ἀσώματα ὄντα καὶ [οὐ] κατηγορήματα.

may discover how perfectly abstract was the sense in which the Stoics understood the term 'agreeable to nature.' For if they had conceived of the universal law, in so far as it is destined to determine the human will, as of a living whole, they would have been forced to maintain that the special endeavours of all individual natures are comprised in the will of the supreme law of nature, and form necessary constituents thereof. We must, therefore, condemn the distinction which they drew between the good and the preferable as a clumsy contrivance, to which the extreme rigour of their moral theory, which would exclude all external motives to action, forced them to have recourse in order to escape from the difficulty which attaches to all those theories which refuse to admit of any other ground of determination of the will than the general form of moral action.

Consequently, it is absolutely impossible to reduce their supreme moral principle into its particular applications by any orderly method, for the special does not stand in the same relation to the universal as particular good does to general. The details of their moral theory are wholly destitute of anything like scientific form, and are only held together in something like coherency by the aid of a few general notions. When, indeed, we compare the comprehensiveness of these ideas with the object-matter of previous philosophers, we find that the Stoics entered much more deeply into the details of the moral activity than either Plato or Aristotle, but that in their investigation into this ac-

tivity they confined themselves almost exclusively to private, paying but little attention to political life.<sup>49</sup> It is true they could not neglect altogether to treat of politics and economics,<sup>50</sup> since these had become essential parts of philosophical ethics, and indeed the treatise of Zeno on the former subject is generally regarded as his chief work. But the principles which he followed therein, and which were adopted very generally by the Stoics, tended greatly to resolve all special unions of state or country, for he taught that the sage ought to regard himself as a citizen of the whole world, and not of any single state or city.<sup>51</sup> Such a view was a necessary consequence of their predominant tendency to the universal. Of their politics and their economics, accordingly, very little notice has been transmitted to us. That, on the other hand, they should have entered more profoundly than any of the earlier philosophers into the investigation of particular activities, is evidence of their disposition to confine the morality of life to the activity of the rational. Viewed from this side, their moral theory assumes the form of a theory of occupations, which in general the sage ought to undertake, and in particular will discharge as a self-presenting matter for action. Accordingly, the delineation of the sage, i. e. of the virtuous man, and of that which is his duty—or in other words, the proper object of his activity, fills a considerable space in the moral

<sup>49</sup> Cic. de Leg. iii. 6, only says, that Diogenes (a very probable emendment for Dion) and Panætius were those of the Stoics who treated with greatest rigour of politics and laws.

<sup>50</sup> Stob. Ecl. ii. p. 188.

<sup>51</sup> See the above-quoted passage, Plut. de Alex. Fort. i. 6.

theory of the Stoics. In this light it may be considered as a theory of duties, and in this respect, as supplying a deficiency in the earlier views of ethics. The Stoics arrived necessarily at the idea of duty from the principle of their theory, which was to reduce every special activity to the universal law of nature. Every activity appeared to be prescribed by this law. The idea of duty, however, they made to be subordinate to that of virtue; because with them the virtuous activity can alone be a duty, and all its external acts are regarded as indifferent. Accordingly, the division of virtues naturally formed the medium by which they passed to the consideration of special doctrines of morality.

By virtue, in a wide sense, the Stoics designated the perfection of every natural faculty; it is in this acceptation that health and strength are numbered among the virtues. Such virtues as these, however, may exist even in the vicious.<sup>52</sup> But true or moral virtue, on the contrary, consists in a force and vigour of the soul arising from rational intelligence, an immutable mental temperament (*διάθεσις*) which admits neither of impulsion nor constraint, and by means of which the soul is, throughout life, consistent with itself.<sup>53</sup> Now as this temperament of the mind depends on the rational intelligence, the virtues are also called sciences, and the moral virtues are called theorematic, in opposition to the

<sup>52</sup> Diog. Laert. vii. 90, 91.

<sup>53</sup> Plut. de Stoic. Rep. 7; Diog. Laert. vii. 89. *τὴν τε ἀρετὴν διάθεσιν εἶναι ὁμολογουμένην*. Ib. 127; Stob. Ecl. ii. p. 104. *τὴν ἀρετὴν διάθεσιν εἶναι φασὶ ψυχῆς σύμφωνον αὐτῇ περὶ ὅλον τὸν βίον*. Ib. p. 110; Simpl. Cat. fol. 61 a.



physical, which are without intelligence.<sup>54</sup> When, however, the Stoics proceeded to apply their theory of virtue to the details of morals, the oneness of virtue, which they invariably insisted upon, was necessarily broken up into a number of constituent parts. In this they followed the division of Plato, which had now become part and parcel of ordinary language, but at the same time were disposed to admit of the greater number which Aristotle had established, for they regarded the four Platonic virtues as principal ones, under each of which they placed several subordinate virtues. Naturally, then, their leading division agrees only in name with that of Plato; for, as they rejected his division of the soul, it could only be in a modified sense that they adopted the division of virtues which was founded upon it. To virtue four things are indispensable; first, a knowledge of what is to be and not to be done, of good and evil, as also of the indifferent, which is the proper office of the reason; secondly, temperance, which is a knowledge of the due regulation of the sensual appetites; thirdly, fortitude, or a conviction that it is good to suffer and undergo whatever is necessary without being shaken in any resolution by fear; and lastly, justice, or an acquaintance with what, according to the right relations of things, ought to be ascribed to every individual.<sup>55</sup> Now, in reference to justice, we have to

<sup>54</sup> Cic. Tusc. iv. 24; Stob. Ecl. ii. 106 sqq.; Diog. Laert. vii. 90, 92.

<sup>55</sup> Stob. Ecl. ii. p. 108. ἔχειν γὰρ ἀφορμὰς παρὰ τῆς φύσεως καὶ πρὸς τὴν τοῦ καθῆκοντος εὐρεῖν καὶ πρὸς τὴν τῶν ὁρμῶν εὐστάθειαν καὶ πρὸς τὰς ὑπομονὰς καὶ πρὸς τὰς ἀπονέμσεις κατὰ τὸ σύμφωνον. Ib. p. 112. These passages are complete. The following accounts are imperfect; ib. p. 104.

observe, that the Stoics confined its sphere to man's relations to others and to the gods; for in the subdivisions of this virtue they comprised both piety and such other virtues as concern the civil intercourse of men.<sup>56</sup> But relatively to himself, they maintained, in opposition to Plato, that a man can do no wrong,<sup>57</sup> as also that he cannot be unjust towards the other animals, because they exist only for his profit, and because of the great dissimilarity of human and brute nature.<sup>58</sup> As to justice towards others, and law, the Stoics held that they are natural, and not conventional; man is a political animal; it is his duty, if need be, to sacrifice himself for his country and the common interest, and in all human and divine things to obey the law.<sup>59</sup> This, however, in fact, indicates nothing but an external relation of virtue, and therefore, strictly understood, is not in agreement with the fundamental principles of the Stoics; and, accordingly, they were constrained to admit that it is only in certain circumstances that the sage will attach himself to human society, but that in all other cases he will decline to take a part in political affairs, and live a separate and retired life.<sup>60</sup> As to the subdivisions of the four principal virtues, the Stoics would appear

Diog. Laert. vii. 92, 126. Cf. Plut. de Stoic. Rep. 7; Galen. de Hipp. et Plat. Plac. vii. p. 209; Cic. Tusc. iv. 24.

<sup>56</sup> Stob. Ecl. ii. p. 106 sq.

<sup>57</sup> Plut. de Stoic. Rep. 16.

<sup>58</sup> Diog. Laert. vii. 129; Cic. de Fin. iii. 20.

<sup>59</sup> Stob. Ecl. ii. p. 184 sq.; Diog. Laert. vii. 121; Cic. de Fin. iii. 19; Chrys. in Digest. i. tit. iii. 3.

<sup>60</sup> Cic. de Fin. iii. 20; Diog. Laert. vii. 122. πολιτεύσασθαι φασι τὸν σοφόν, ἂν μὴ τι κωλύῃ. — κυνεῖν τε αὐτόν.

to have endeavoured to give them also a sort of logical order;<sup>61</sup> but on this point our information is very incomplete and confused. It is, however, clear that in their account of the inferior virtues, they did not observe the plan of determining each lower notion of virtue by the next higher.<sup>62</sup> We are therefore disposed to conclude that they found it impossible to give to their doctrine of virtue, in detail, anything like a strictly scientific derivation, and indeed there is much in this portion of their ethical system to favour this assumption.

Now, according to the Stoics, the man who possesses virtue is a sage, while he who is without it is a fool, and between these two there is not, as we observed before, an intermediate state. They did not indeed deny that there is a progress, a way to be trodden in order to arrive at virtue, which they seem to have placed in the practice of the arts of life and the sciences;<sup>63</sup> nevertheless, adhering strictly to the antithesis of ideas, they refused to see any thing virtuous in the advance towards virtue, but maintained that he only is wise who with perfect science has chosen virtue, and that whoever acts even rightly without this knowledge is a fool.<sup>64</sup>

<sup>61</sup> Traces of this are to be found in Diog. Laert. vii. 126.

<sup>62</sup> Stob. Ecl. ii. p. 106 sq.; Diog. Laert. vii. 92, 93.

<sup>63</sup> Stob. Ecl. ii. p. 122. *τό τε ἐπιτήδευμα τοῦτον ἐπιγράφουσι τὸν τρόπον, ὁδὸν διὰ τέχνης ἡμίρου ἀγούσαν ἐπὶ κατ' ἀρετήν (ἐπὶ τὸ κατ' ἀρ. ?).* Cf. Diog. Laert. vii. 91. Hereto belongs the distinction between obstinate and not obstinate vices. Stob. Ecl. ii. p. 236. According to Chrysippus, ap. Stob. Serm. ciii. 22, the essential difference between the *προκόπτων* and the sage is, that the latter acts with perfect certainty and therefore is happy, but the former not.

<sup>64</sup> Ib. p. 116, 120, 198; Diog. Laert. vii. 127. *ἀρίσκει δὲ αὐτοῖς μηδὲν μίσσον εἶναι ἀρετῆς καὶ κακίας, τῶν Περιπατητικῶν μεταξὺ ἀρετῆς καὶ κακίας εἶναι λεγόντων τὴν προκοπήν. ὥς γὰρ δεῖν φασὶν ἢ ὀρθὸν εἶναι ξύλον ἢ*

In fact, this idea of the Stoical sage was so severe and rigorous that one may well doubt if ever it has been realised in human life. Even the Stoics do not seem to have asserted so much; Chrysippus refused to acknowledge this character in himself, his friends, or his teacher. Almost every one was at liberty to suppose that in old long-forgotten times such a sage might have been, but even the very best of all historical persons appear only to be advancing on the road to virtue.<sup>65</sup> Their notion of a sage was therefore nothing more than a pure ideal, the realisation of which ought to be the object of our endeavours; when, therefore, we find that their special doctrine of morality is occupied almost exclusively with the delineation of this idea, we have the fullest proof possible of the inadequacy of their general principle to lead to any fruitful development of particular rules or precepts. This, in short, is the germ of their paradoxical assertions, their perverted views of human life, which is necessary to positions nothing less than truly immoral.

These disquisitions upon the character of the sage, of which it is only requisite to notice the more important points, may be arranged under two heads; the one comprising what the sage ought to be, and the other what he ought to do and submit to. As to the first, the sage ought to be virtuous,

*σπρεβλόν, οὕτως ἡ δίκαιον ἢ ἀδικον, οὔτε δὲ δικαιοτέρον οὔτε ἀδικώτερον, καὶ ἐπὶ τῶν ἄλλων ὁμοίως.* Plut. de Abs. Stoic. Op. 2.

<sup>65</sup> Plut. de Stoic. Rep. 31; Sext. Emp. adv. Math. ix. 133; Diog. Laert. vii. 91; Sen. Ep. 90. From Diog. Laert. ib. it has been inferred that Posidonius was the first who introduced the *προκοπή* into the Stoical doctrine; but he only says that the *προκοπή* is a mean between virtue and vice, but still a vice. The advance to virtue the Stoics compared to the state of a puppy who is yet blind but is slowly developing the mechanism of sight. Cic. de Fin. iii. 14.

and through virtue perfectly happy ; the happiness which he will enjoy is one which, in the customary language of the Stoics, cannot be enhanced by any accession of time ;<sup>66</sup> for the whole energy of the sage is employed on his present activity. This of course implies that the sage is raised above all influence of external events ; he submits, it is true, to the law of destiny, but his inward life is neither troubled nor promoted by it.<sup>67</sup> The sum of these doctrines is expressed by the notion of apathy, i. e. in the perfect freedom of the sage from every passive and irrational emotion, and from every disturbance of his equanimity. He is exempt from desire and fear, joy or sorrow, which are the chief of the passive affections.<sup>68</sup> That is to say, he is exposed to both pain, sorrow, and the like, but, nevertheless, he does not allow himself to be governed by them. For the rule of the passions is slavery : and the sage is truly free, for he submits to his reason alone. Similarly he alone is truly rich, a true king and master, the true soothsayer and poet, and generally he alone acts with intelligence ; whilst in all others nature carries on her irrational operations.<sup>69</sup> In short, the sage of the Stoics is described by them as like a God in his mental states, and they allow him to pride himself thereon, and to boast like Jupiter of his mode of life.<sup>70</sup> The

<sup>66</sup> Plut. de Stoic. Rep. 26 ; Stob. Ecl. ii. p. 198.

<sup>67</sup> Plut. l. l. 20, 30, 31.

<sup>68</sup> Stob. Ecl. ii. p. 166 ; Diog. Laert. vii. 110 ; Cic. de Fin. iii. 10.

<sup>69</sup> Stob. Ecl. ii. p. 122, 172, 204 ; Serm. vii. 21 ; Cic. Acad. i. 10 ; ii. 44 ; Diog. Laert. vii. 116 sq. ; Plut. de Aba. Stoic. Op. 1, 4. The sage may experience pleasure and pain, but they do not make him worse ; i. e. they never acquire any influence over his will. Plut. adv. Stoic. 25.

<sup>70</sup> Plut. de Stoic. Rep. 13 ; adv. Stoic. 33. There is something singular in

ground of this doctrine is simple enough; it is the simple result of the idea that the sage has attained to a pure and stable development of reason, and to a perfect knowledge of good. When, however, the Stoics proceeded to determine the conduct of the sage in different positions and circumstances of life, their theory becomes extremely complicated and difficult.

Now here the first object would naturally be to place the sage in action, and to determine the character of his acts and endurance. Now external actions are the expression of virtue, and they are consequently all virtuous, and, so far as they are subject to the universal law of morality and regulated by it, acts of duty. Now in their consideration of these acts, the Stoics introduced a distinction similar to that which they drew between the good and the preferable. Thus whatever is done agreeably to, or in accordance with nature, they named the befitting (*καθῆκον*), and ascribed it not only to infants but also to irrational animals, and even to plants. Now the befitting or convenient, as being conformable to nature, cannot be inconsistent with reason,<sup>71</sup> and it was regarded by the

the supposition of Chrysippus, that the sage, when he has become so, cannot know the fact. It is difficult to explain how such a doctrine could ever have found a place in the Stoical system. Plut. adv. Stoic. 9, 10; de Stoic. Rep. 19. Some explanation of the matter is afforded by Phil. de Agric. 37, p. 325, (compare also Stob. Ecl. ii. p. 234 sq.) who evidently sets out from Stoical principles. The view on which it was founded seems to have been this, that the sage, in order to be conscious of his wisdom, must have experimentally applied it to life.

<sup>71</sup> Stob. Ecl. ii. p. 158. *ὀρίζονται δὲ τὸ καθῆκον τὸ ἀκόλουθον ἐν ζωῇ, ὃ πραχθὲν εὐλογον ἀπολογία ἔχει* — *τοῦτο δὲ διατείνειν καὶ εἰς τὰ ἄλογα τῶν ζῴων, ἐνεργεῖ γάρ τι κάκεινα ἀκολουθῶς τῇ ἑαυτῶν φύσει.* Diog. Laert. vii. 107, 108, 110; Cic. de Fin. iii. 6.

Stoics as the lowest degree of development, and as something not opposed to the natural life. Thus considered, however, it is something intermediate, being in itself neither good nor evil; it belongs to indifferent things in the same manner as the preferable, which in itself is indifferent, and receives its true import only from its relation to some other object.<sup>72</sup> But, as we have already seen, there is a higher development of what is truly conformable to nature; that, viz., which has reason in itself, and is human and moral good: there must also be a higher kind of the befitting, which consists in actions agreeable to reason and morality. These actions the Stoics designated as just and dutiful, by the term *κατόρθωμα*, and opposed them to those which violate the law of duty, or sins (*ἀμαρτήματα*).<sup>73</sup> According to this, then, dutiful conduct appears as a species of the befitting, distinguished from all others in this respect, that it is the perfectly befitting according to reason, the highest development of reason in practice, the virtuous activity of the soul.<sup>74</sup> To understand this distinction rightly, it is advisable to notice that it lies not in the object of action, but in its form. For, according to the Stoics, an action is dutiful, or merely be-

<sup>72</sup> Stob. l. 1.; Cic. de Off. i. 3.

<sup>73</sup> According to Simpl. Cat. fol. 54 b. the *κατόρθωσις* is neither *κίνησις* nor *σχίσις*, but a higher genus. Plat. de Stoic. Rep. 11. τὸ κατόρθωμά φασι νόμον πρόσταγμα εἶναι· τὸ δ' ἀμαρτήμα νόμου ἀπαγόρευμα.

<sup>74</sup> Stob. l. 1. τῶν δὲ καθήκοντων τὰ μὲν εἶναι φασιν τέλεια, ἃ δὲ καὶ κατορθώματα λέγεσθαι· κατορθώματα δ' εἶναι τὰ κατ' ἀρετὴν ἐνεργήματα, οἷον το φρονεῖν, τὸ δικαιοπραγεῖν· οὐκ εἶναι δὲ κατορθώματα τὰ μὴ οὕτως ἔχοντα, ἃ δὲ οὐδὲ τέλεια καθήκοντα προσαγορεύουσιν, ἀλλὰ μέσα, οἷον τὸ γαμῖν, κ. τ. λ. Ib. 184. κατορθώματα δ' εἶναι λίγονσι καθήκον πάντας ἰπύχον τοὺς ἀριθμούς. Ib. 192, 220; Cic. de Fin. iii. 18.

fitting, according as it results or not from a virtuous sentiment. The action of walking is in truth a befitting one, when it is performed in season and naturally, but it is not an act of duty unless it has some rational end in view.<sup>75</sup> In this manner then, this distinction becomes almost identical with that between the preferable and the good. A virtuous life is invariably a perfect duty, whereas whatever is relative to the preferable merely, and according to circumstances may or not be a duty, is called an imperfect duty.<sup>76</sup> To determine, therefore, in detail the times and circumstances in and under which certain actions become matters of duty, was necessarily an important object of the moral theory of the Stoics, since the division of perfect duties necessarily coincides with that of virtues.<sup>77</sup>

What then are we to understand by imperfect duties? In the first place, the Stoics do not appear in the enumeration of these duties to have followed as scientific a method as in their subdivision of the virtues. In their delineations of the sage they have done no more than heap together a mass of particular precepts for his guidance in particular occasions and circumstances, which, however, as the Stoics did not look upon the preferable and relative good as necessary elements of the moral life, are consequently without any scientific base whatever. We must therefore confine ourselves to mentioning the principal and most characteristic fea-

<sup>75</sup> Stob. Ecl. ii. p. 192.

<sup>76</sup> Diog. Laert. vii. 109. *ἔτι τῶν καθήκοντων τὰ μὲν αἰ καθεύκει, τὰ δὲ οὐκ αἰεὶ καὶ αἰ μὲν καθεύκει τὸ κατ' ἀρετὴν ζῆν, οὐκ αἰεὶ δὲ τὸ ἐρωτᾶν καὶ ἀποκρίνεσθαι καὶ περιπατεῖν καὶ τὰ ὅμοια.*

<sup>77</sup> Compare Stob. l. l.



tures of the Stoical theory of duties. Agreeably to their general principles, the imperfect duties were referred immediately to the law of self-preservation and defence. This duty they considered as the befitting, absolutely and independently of circumstances. Nevertheless they taught, that there may be occasions on which it is convenient and befitting to neglect the principal ends of nature, and then the befitting is purely circumstantial.<sup>78</sup> To the former class of the befitting, they ascribed the care of the health, the vigorous condition of the body, and the possession of external advantages ; whereas in the latter view of the befitting, they considered it right on occasions to suffer loss of fortune or of limb. The latter species of the befitting belongs to the more rigorous aspect of the Stoical theory, and tends to inculcate the sacrifice of the individual to the whole. The sage ought not to live only for himself, but to consider himself a member of the whole body of mankind, and study to promote the general good rather than any special interests of his own.<sup>79</sup> He must look upon himself as a member of a family, and as a member of the state, and in all these respects he has certain duties to discharge. He ought to marry ; he ought to take a part in public affairs, although this duty is conditional upon the administration of the state agreeably to the principles of true policy, and when no obstacle exists. For in public life he may check the progress of vice and advance the cause of vir-

<sup>78</sup> Diog. Laert. vii. 109. καὶ τὰ μὲν εἶναι καθήκοντα ἀνευ περιστάσεως, τὰ δὲ περιστατικά.

<sup>79</sup> Ib. 123 ; Cic. de Fin. iii. 19, 20.

tue. But the character of his administration will be marked by rigour, he will never give way to compassion, indulgence, or forgiveness; nor even to any idea of equity in opposition to the strict requisitions of the law.<sup>80</sup> He will seek friends and love them for their own sake.<sup>81</sup> On almost all points the Stoics are directly at issue with the Epicureans, and partly also with the somewhat lax doctrines of the later Peripatetics; they set themselves in opposition to the self-seeking spirit of their age, as is strikingly expressed in their doctrine that the sage does not desire corporeal and external good things for their own sake, but for the sake of others whom they may benefit by them. On the other hand, they evinced their contempt for the preferable by leaving the sage free to act as he will in reference to it. This permission is the source of many peculiarities of the Stoical theory. Essentially the sage is superior to all law and custom, and he is even allowed to commit the greatest enormities if occasion require them, and they be performed with a virtuous intention. Whilst on the one hand the Stoics showed themselves so scrupulous as to forbid even the most indifferent matters, but which to the eyes of a bigoted religion appear to be marked by impiety,<sup>82</sup> they, on the other hand, allowed the sage every license, so long as the motive of action be neither self-interested nor voluptuous. To pass over their defence

<sup>80</sup> Plut. de Stoic. Rep. 2; Diog. Laert. viii. 120, 121, 123; Stob. Ecl. ii. p. 184 sq., 224, 228.

<sup>81</sup> Diog. Laert. vii. 124; Stob. Ecl. ii. p. 184 sq.; p. 222.

<sup>82</sup> Plut. de Stoic. Rep. 22.

of lying, when it is not for purposes of deceit but of gain,<sup>83</sup> of pederasty,<sup>84</sup> of suicide,<sup>85</sup> of a life of prostitution,<sup>86</sup> their disregard of funeral rites,<sup>87</sup> and the like, we find them allowing to the sage actions at which human nature shudders, and the virtuous man shrinks to name. To eat human flesh is not contrary to nature;<sup>88</sup> such intercourse as that of Jocasta and Œdipus is a matter of indifference.<sup>89</sup> This is evidently a still remaining trace of the cynical element of the Stoical character, which indeed may so far be excused by being considered as the rules of conduct of the sage, i. e. of one who knows even the minutest results and consequences to which the universal course of nature must lead;<sup>90</sup> or, in other words, of one who cannot err, and whom reason never fails:<sup>91</sup>—in short, of one who in this life will never be found. To such a character much must undoubtedly be permitted, which in creatures of limited intellects would be crime and enormity. Still there is much of danger in the delineations of such an ideal; which ideal, moreover, is itself full of contradictions. For it is easy to

<sup>83</sup> Stob. Ecl. ii. p. 230.

<sup>84</sup> Diog. Laert. vii. 129; Stob. Ecl. ii. p. 118, 238.

<sup>85</sup> Diog. Laert. vii. 130; Plut. adv. Stoic. 33; Stob. Ecl. ii. p. 236; Cic. de Fin. iii. 18.

<sup>86</sup> Sext. Emp. Pyrrh. Hyp. iii. 201.

<sup>87</sup> Ib. 248; adv. Math. xi. 194.

<sup>88</sup> Ib. 193, 194; Diog. Laert. viii. 188.

<sup>89</sup> Plut. de Stoic. Rep. 22; Diog. Laert. i. 1.

<sup>90</sup> Stob. Ecl. ii. p. 232. Here the proposition *οὐδὲ λανθάνειν αὐτόν τι* (sc. *τὸν σοφόν*), appears to be exaggerated to judge from the passages next quoted. The text is however very corrupt.

<sup>91</sup> Stob. Ecl. ii. p. 120. *μόνον δὲ φασὶ τὸν σοφὸν καὶ μάντιν ἀγαθὸν εἶναι καὶ ποιητὴν καὶ ῥήτορα καὶ διαλεκτικὸν καὶ κριτικόν, οὐ πάντα δὲ, διὰ τὸ προσδεῖσθαι εἰς τίνα τούτων καὶ θεωρημάτων τινῶν ἀναλήψεως.*

persuade men, that what is permitted to the perfect must surely be allowed to the imperfect, and the manner in which the Stoics too often terminated their existence proves clearly that they had not sufficiently guarded against this error. In short, it has tainted their whole theory of morals: for, if we ask, why so many rules are furnished to guide the conduct of the sage, while the sage is in no need of such assistance, we cannot but answer that it must be for us, the rest of men, who are at best but fools, that these precepts are furnished to aid and direct our ignorance. Indeed the Stoics were of opinion, that all such rules are only of use to those who are on the way to wisdom; and this view is the basis of all ancient works of Stoical ethics.

However greatly the Stoics may have laboured to give to the details of their moral theory a systematic form, they were not influenced therein by any vital philosophical impulse, so much as by the wants of an erudition tending to embrace within its sphere the whole range of ideas previously developed. It is on this account that, in detail, their theory of morals is so little fruitful, and that it advances so few ideas pregnant with any vivid philosophical import, either in physics or in the special questions of logic, concerning the forms of thought and language, and the categories. Nevertheless, their philosophical theory was not altogether without life and influence. If we consider the time in which they lived, we shall be far from looking to it for a calm and steady development of a vital philosophical impulse. For at this time, the

elements of Greek vitality were in rapid decomposition, and it is only by setting itself in opposition to the corrupting and dissolving sentiment that scientific culture can defend itself from its fast-growing and evil influence. Hence the character of extremeness which marks the Stoical doctrine: it attacks corrupting error with stern and unrelaxing severity, and a passionate zeal for law and justice is manifest even amidst its most extravagant errors.

The tendency of their logic might be explained entirely by the character of their physical theory, were it not perhaps to be viewed rather as a simple consequence of the age in which they lived. Their aversion for the general, the abstract, and the immaterial, led them to attempt to derive all knowledge from the individualities of experience. To this they were also led by the desire to establish some stable ground for certainty against the attacks of a growing scepticism. In the opinion of their age, that appeared to have the most undoubted truth which exhibits itself as real by its immediate operation on the sensuous organs. The general, therefore, with the Stoics, was posited in the totality of individuals, and the unity of the latter in the whole. The form also is inseparable from matter; and, according to the ancient notion of matter, as the ground of the corporeal, all whatever is, is a formed body. To this result the Stoical categories led, in like manner; and the categories may be considered as conclusions from their general principles. Now the whole corporeal essence of the world, as the ground of all natural becoming,

was regarded by the Stoics as a living force, which, being conceived of as God, orders all change. By this hypothesis they thought to obviate the difficulties in which Plato and Aristotle were involved, when, in their endeavour to reduce all to some rational ground or principle, they were forced to admit that a certain necessity of imperfection enters into the constitution of the world. For such a view appears to enforce the admission of two opposite mundane principles. But the Stoics united the necessity of becoming with the rational cause, matter with form, in one substance, and considered the universe as a living thing, which, according to certain eternal laws, produces all things out of itself, and, in the orderly procession of its life, resumes them again into itself; and in their attempt to render sensible this view, they explained this divine world to be a living fire, a rational soul, which, out of its own matter, artistically forms all in the most perfect harmony and the greatest variety, without sameness or repetition. By this hypothesis they undoubtedly got rid of a contrariety of principles, nevertheless their one supreme ground became itself involved in contrariety; living at one time, within itself, the most perfect life, but at another, when it has passed out of itself, becoming subject to the limited life of manifold things. On this point we must confess that the Stoics misunderstood the doctrines of their predecessors, which were grounded on the view that God, the perfect ground of all entity, is unchangeable either to better or to worse. But, on the other hand, they were led to this by the imperfect nature of anterior speculations, in so

far as they were unable to combine into unity these two grounds ; and that the Stoical attempt thereat is perfectly in keeping with the wish to reduce all things to the sensible and the changeable elements of experience. Now the Stoics having confounded the idea of God with that of the universe, and regarded the *cosmopœia* as a period in the development of God, they gave thereby a very simple form to their theory. All in the world appeared to them to be pervaded by a divine life, proceeding from and passing through certain intermediate gradations, back again to the most perfect life, and therein constantly forming out of itself a necessary period. To this eternal law of nature all is subject. Their view, however, becomes somewhat more complicated by their admitting into the world a certain contrariety, a certain self-sufficiency, in the individual parts of the world ; but this doctrine is subordinate to the general principle, and is reconciled with it by the assumption that everything, in its proper life, must follow the essence which it received from the universal nature, and which the latter will again take back into itself. This independence and self-sufficiency of individuals is carried out to the highest degree in the notion of the rational soul, which has a peculiar intelligence. In their views of the soul the Stoics endeavoured principally to reduce all phenomena to a universal faculty of man, and this is the cognisant reason, whereby all the impulses of human life are subject to the reason as their cause. But as in universal nature there is a two-fold aspect, so too in the reason of man there is a passive matter and an active force, and hence arise

all the natural aberrations of reason. The object of the Stoical morals is to repress these, and to strengthen the authority of the active force of the soul. But in this the leading principle of their system recurs again, according to which man must in all things follow nature. All moral rules, accordingly, are comprised in physics, which is the knowledge of nature. Nothing is good but to obey the universal law of nature, and agreeably thereto to effect whatever will best promote the perfect development of man's rational nature. But it is virtue alone can effect this consistency of life, not only with itself but also with all the rest of the world. Compared with it, all else, however it may promote the good of the body, and external advantages, is merely a mean, of transient value; and it is only conditionally that it can be an object of desire, being in itself absolutely indifferent. Every individual act is merely befitting in the same measure as it fashions itself to circumstances, and takes into account the changeable value of all mundane things; the most perfect degree of the befitting attains only to the height of true duty when its object is to realise and to carry out into action the rational power, the true virtue; and thereby, by intelligence, enters into the general course of the mundane development. This is the life of the sage, which, exalted above all let and hinderance, no mortal can now attain to; indeed the higher and the more general the Stoics made their ideal, and the more did they neglect all external circumstances, the more dissatisfied must they have become with the reality of things: they became



scorners, if not of human nature, at least of men as they are. But discontent with the present is ever a mark of senile cast of thought, of decay. The old are fond to dream of a better past. This is the decided character of the Stoical view. Plato, indeed, in his own mythical manner, might well indulge in fancies of a previous better existence of the soul; and he even despaired not of attaining to perfect wisdom in the present life; and Aristotle, too, might speak of a lost wisdom of earlier times, whose knowledge and inventions we should in vain hope to recover; but the Stoics looked upon themselves as fools, living among fools; all existing constitutions of government were already corrupt, and far removed from that ideal which the Stoics cherished; an earlier age, of which all history is lost, might perhaps have seen the character of the sage; in past times philosophy reigned over arts and actions with more constraining authority; but now, and for a long while since, the best of men are but fools, who are striving after wisdom and virtue.<sup>92</sup> By such contempt of their age and contemporaries, the Stoics fell into great inconsistencies. In logic, no one was more firmly opposed than they were to all doubt that the truth may be known. They maintained the possibility of a true science, a true philosophy; and they also saw that without virtue there can be no philosophy, and that the pursuit of wisdom is itself a wisdom and a virtue. But in their ethical doctrine they found themselves forced

<sup>92</sup> So Chrysippus, *Plut. de Stoic. Rep.* 31; *Sext. Emp. adv. Math.* ix. 133; *Diog. Laert.* vii. 91. A mere rhetorical repetition of this view is to be found in *Posidonius. Senec. Ep.* 90.

to admit that true virtue, and with it true knowledge also, is far from the reach of man. Even the only knowledge that is important, is denied to him; and he is without that true insight into the course of the mundane development which ought to be the guide and standard of his conduct. He who despises the age in which he lives, must despise himself, and despise even his own contempt for it. It may appear, perhaps, singular that the Stoics should, on the one hand, have denied all distinction between the sensible and the intelligible, and yet, on the other, have opposed, in the sharpest manner possible, the rational to the irrational. Yet, in truth, the latter course is but a natural result of the former. For as they still wished to maintain a distinction between the perfect and the imperfect, they had no other recourse open to them than to reduce it to a simple difference of degree; and, in order to give something like distinctness to these vague terms, they were forced to place one of the two at the extreme end of the natural development. Accordingly, they made the sage to be the highest perfection of life; all lower developments do not pass beyond the domain of ignorance and folly; there is the same difference between the sage and the fool as between a straight and crooked staff. They could not admit that there is a true reason in any imperfect development of life, even because reason is not an element but merely a grade of vitality. This is the source of all the sternness and extravagancies of their moral theory. For the highest degree of moral energy cannot possibly be in need of any external aid and sup-

port ; it can never hesitate ; he who once possesses it, possesses it for ever. All this must be regarded as the legitimate consequences of the Socratic ideal of science and virtue, so soon as the hope of its attainment is based upon a certain gradation, and not upon a free and comprehensive development of life proceeding from manifold and various elements. It cannot be denied that the Stoics treated even the greatest and most wholesome truths so partially as to be led thereby into the greatest absurdities of doctrine, and even inconsistencies with their general principle ; nevertheless, the success of their doctrine, slightly modified in a few points, and its popularity for many ages, and with men of the noblest and most scientific character, is a proof that it was admirably calculated for the times and circumstances under which it was first advanced.

## CHAPTER VI.

### THE LATER STOICS—THE NEW ACADEMY—CONCLUSION.

FROM this point our history pursues another march. We have no more to treat of original systems, advanced with great boldness and comprehensiveness of view, and extreme sagacity of detail; on the contrary, whenever we shall have rarely occasion to notice any change of scientific view, it will be found to concern only a few isolated points, without pervading the whole existing domain of scientific ideas. The creative energy of scientific invention has become weak, if not lifeless; and man can do no more than repeat the old. We have rather to treat of a state than of a development.

In the first place, the Stoics who followed Chrysippus contributed but little to the cause of philosophy. Their principal object seems to have been to give, by precise and determinate formulæ, greater rigour of enchainment to their scientific ideas. Accordingly, they introduced many changes in the exposition of their doctrines. Thus with the forms of the earlier Stoics, those of Diogenes of Seleucia, usually known as the Babylonian, a scholar of Chrysippus, and those of Antipater of Tarsus and Archidemus, two disciples of Diogenes, are frequently given, for the most part in order to show their agreement of view, but at times also a greater or less discrepancy of opinions. In such passages

we find occasional traces of their deviating, more or less, from the meaning of their teachers. Diogenes and Antipater, in their exposition of the moral end, appear to have laboured to give a closer connection than did the earlier Stoics to the good absolutely, and that reference to the preferable which is unavoidable in the conduct of life.<sup>1</sup> Now even though this, perhaps, may not constitute any essential deviation from the genuine Stoical doctrine, still it seems to indicate that the later Stoics had begun gradually to ascribe greater importance to what is merely relative in human efforts, and to elevate it from the sphere of the indifferent into an essential constituent of good. Moreover, this introduced a milder spirit into the Stoical theory of morality, which extended, as we shall subsequently show, more and more to their whole school. But a still more important modification of doctrine was introduced into the Porch by Zeno of Tarsus, the successor of Chrysippus, who called in question a fundamental position of the Stoical theory, the doctrine of a universal conflagration. For when it is considered that hereby the end of the mundane development was removed, and besides, that the strongest efforts of the Stoics, in their physiology, were directed to the discovery of the decline and growth of fire in the evolution of the world, it must be clear that the same change of views was brought about step by step in the Stoical as in the other

<sup>1</sup> Stob. Ecl. ii. p. 134. Διογένης δὲ (sc. τὸ τέλος εἶναι) εὐλογιστίαν ἐν τῇ τῶν κατὰ φύσιν ἐκλογῇ καὶ ἀπεκλογῇ. — Ἀντίπατρος δὲ ζῆν ἐκλεγόμενους μὲν τὰ κατὰ φύσιν, ἀπεκλεγόμενους δὲ τὰ παρὰ φύσιν διηνεκῶς.

schools of philosophy.<sup>2</sup> Of this we shall soon find still stronger proofs. But the series of these modifications does not concern the Stoical school exclusively; on the contrary, they were dependent on the general movement of science among the Greeks, and must consequently be considered by us under this more extensive aspect.

In the first place, it is in the Academy that this gradual modification of doctrine most distinctly announces itself. Hence a variety of schools have been distinguished in its history, of which the old and the new are marked by essential differences of view.<sup>3</sup> On the old we have already treated; the new was formed nearly contemporaneously with, but somewhat later than, the foundations of the respective schools of Epicurus and Zeno. Its author, Arcesilaus, born at Pitane, Ol. 116. 1.<sup>4</sup> had at first applied himself to rhetoric, but subsequently passed to the study of philosophy, in which he had, for teachers, first Theophrastus, then Crantor the Academician, and probably also Polemo.<sup>5</sup> Besides

<sup>2</sup> Arius. Didym. ap. Eus. Pr. Ev. xv. 18. This person is also said to have been the teacher of Diogenes the Babylonian. Philo de Mundi Incorr. 10, p. 497, ed. Mang.

<sup>3</sup> Some enumerate as many as five Academies, the old founded and maintained by Plato and his immediate successors, the second or middle founded by Arcesilaus, the third or new by Carneades, the fourth by Carneades, the fifth by Antiochus. Sext. Emp. Pyrrh. Hyp. i. 220; Eus. Pr. Ev. xiv. 4.

<sup>4</sup> As to the chronology consult Diog. Laert. iv. 44, 45, 61. The date of his flourishing is perhaps placed too early, although his reputation was quickly established. Cf. Plut. adv. Col. 26. As to the difficulties involved in these statements consult Clinton's *Fasti Hell.* p. 367 h.

<sup>5</sup> Diog. Laert. iv. 24, 29; Cic. Ac. i. 9; Numen. ap. Eus. Pr. Ev. xiv. 5. The statement that Arcesilaus was the disciple of Polemo at the same time as Zeno, appears to be ill-grounded, and to involve great chronological difficulties. It is very probably a mere fiction, designed to suggest some outward motive

these he is also said to have diligently attended to the lessons of the Eretrian Menedemus, the Megarian Diodorus, and the sceptic Pyrrho.<sup>6</sup> His love for the philosophemes of these individuals has been referred to as the source of his scepticism, and his skill in refuting philosophical principles. At the same time, it is on all hands admitted that, of philosophers, Plato was his favourite.<sup>7</sup> He seems to have been sincerely of opinion that his view of things did not differ from the true spirit of the Platonic doctrine, nay more, that it was perfectly in agreement with those older philosophemes from which, according to the opinion of many, Plato had drawn his own doctrines—Socrates, viz. Parmenides and Heraclitus.<sup>8</sup> For a respect for and consequent appeal to, the authority of the earlier philosophers, was a common feature of the new Academy.<sup>9</sup> Upon the death of Crantor the school in the Academy was transferred by a certain Socratides to Arcesilaus,<sup>10</sup> who here introduced again the old Socratic method of teaching in dialogues,<sup>11</sup> with perhaps this difference, that he allowed longer discourses to the opponent and advocate of the point in dispute. This, at least, is apparently the meaning of the tradition on the subject; and is moreover confirmed, in some degree, by the praise

for the controversial relation of the Porch and the Academy. The statements of Numenius are incredible.

<sup>6</sup> Diog. Laert. iv. 33; Numen. ap. Eus. Pr. Ev. xiv. 5, 6.

<sup>7</sup> Diog. Laert. iv. 32, 33; Numen. l. l.; Sext. Emp. Pyrrh. Hyp. i. 234.

<sup>8</sup> Plut. adv. Col. 26.

<sup>9</sup> Cic. Ac. i. 12.

<sup>10</sup> Diog. Laert. iv. 32.

<sup>11</sup> Ib. 28; Cic. de Orat. iii. 18.

which has been bestowed upon the eloquence of Arcesilaus.<sup>12</sup> This practice, however, was rather a corruption than an imitation of the genuine Socratic method. Arcesilaus does not appear to have committed his opinion to writing; at least the ancients were not acquainted with any work which could confidently be ascribed to him.<sup>13</sup> Now as his disciple Lacydes also abstained from writing, the ancients themselves appear to have derived their knowledge of his opinions only from the works of his opponents, of whom Chrysippus was the most eminent.

Such a source must naturally be both defective and uncertain. Accordingly we have little that we can confidently advance with respect to his doctrine. According to these statements the results of his opinions would be a perfect scepticism expressed in the formula that he knows nothing, not even that which Socrates had ever maintained that he knew, viz., his own ignorance.<sup>14</sup> This expression of his opinion implicitly ascribes to Arcesilaus a full consciousness that he differed in a most important point from the doctrine of Socrates and Plato. But as the ancients do not appear to have ascribed any such a conviction to Arcesilaus it seems to be a more probable opinion, which imputes to him a desire to restore the genuine Platonic dogma and to purify it from all those precise and positive de-

<sup>12</sup> Diog. Laert. iv. 36, 37; Numen. l. l.; Cic. Ac. ii. 18.

<sup>13</sup> Diog. Laert. iv. 32; Plut. de Alex. Fort. i. 4. In addition to some epigrams, some works otherwise given to Crantor, are said to be his works. Diog. Laert. iv. 24.

<sup>14</sup> Cic. Ac. i. 12. Itaque Arcesilaus negabat esse quidquam quod sciri posset, ne illud quidem ipsum, quod Socrates sibi reliquisset.



terminations which his successors had appended to it.<sup>15</sup> Indeed one statement expressly declares that the subject of his lecture to his most accomplished scholars, was the doctrine of Plato ;<sup>16</sup> and he would therefore appear to have adopted this formula with a view to meet more easily the objections of the Dogmatists. Now, if we thus attach Arcesilaus to Plato, we must suppose him to have been in the same case with many others, and unable to discover in the writings of Plato any fixed and determinate principles of science. The ambiguous manner in which almost every view is therein advanced, and the results of one investigation, admitted only conditionally to other inquiries, may perhaps have led him to regard the speculations of Plato in the mere light of shrewd and intelligent conjectures. Accordingly, we are told, Arcesilaus denied the certainty, not only of intellectual, but also of sensuous knowledge.<sup>17</sup> For his attack upon the former, Plato would furnish him with weapons enough ; and it is against it principally that his attacks were directed, for the Stoics were his chief opponents. As to the arguments which he may have employed, we possess but little information, and that of a very general character. He attacked the Stoical doctrine of

<sup>15</sup> Cic. l. l.

<sup>16</sup> Sext. Emp. Hyp. Pyrrh. i. 234. *εἰ δεῖ καὶ τοῖς περὶ αὐτοῦ λεγομένοις πιστεῦναι, φασὶν ὅτι κατὰ μὲν τὸ πρόχειρον Πυρρώνιος ἐφαίνετο εἶναι, κατὰ δὲ τὴν ἀλήθειαν δογματικὸς ἦν. καὶ ἐπεὶ τῶν ἱταίρων ἀπόπειραν ἐλάμβανε διὰ τῆς ἀπορηματικῆς, εἰ εὐφυῶς ἔχουσι πρὸς τὴν ἀνάληψιν τῶν Πλατωνικῶν δογμάτων, δόξαι αὐτὸν ἀπορητικὸν εἶναι· τοῖς μὲντοι γε εὐφύεσι τῶν ἱταίρων τὰ Πλάτωνος παρεγχερεῖν.*

<sup>17</sup> Cic. de Orat. iii. 18. Arcesilas — ex variis Platonis libris sermonibusque Socraticis hoc maxime arripuit, nihil esse certi, quod aut sensibus aut animo percipi possit.

a convincing conception (*φαντασία καταληπτική*),<sup>18</sup> as understood to be a mean between science and opinion; such a mean, he argues, does not exist, and consequently it is merely the interpolation between them of an idle name. If the convincing conception be defined to be one, which arrives to the mind from a real object (unless, forsooth, it may also be furnished to the mind by an unreal one), it may easily be shown that such a conception cannot legitimate itself.<sup>19</sup> In support of this view, the new Academy appealed with Plato to the uncertainty of the senses, which declare opposites of the same object, and are unable to reveal to us the true nature of things;<sup>20</sup> and in particular against the opinion that the object of knowledge is the cause of knowledge in us, Arcesilaus advanced the argument that, according to such a view, ignorance would be a cause of knowledge.<sup>21</sup> He appears to have been less diligent in advancing arguments against the validity of intellectual knowledge—that is to say, against a point wherein his own view materially differed from that of Plato. In this, however, the course of scientific speculation subsequent to Plato, appears to have sufficiently prepared the way. With Aristotle, he may have looked upon the ideal theory and the doctrine of the anamnesis as groundless assumptions, which were never intended seriously, even by Plato him-

<sup>18</sup> Sext. Emp. adv. Math. vii. 151 sqq.

<sup>19</sup> Cic. Ac. ii. 24. Incubuit autem in eas disputationes, ut doceret, nullum tale esse visum a vero, ut non ejusmodi etiam a falso possit esse.

<sup>20</sup> Plut. adv. Col. 28; Cic. Ac. ii. 6; Sext. Emp. adv. Math. vii. 408 sqq.

<sup>21</sup> Plut. Fragm. vii. 1. ὅτι οὐ τὸ ἐπιστητὸν αἴτιον τῆς ἐπιστήμης, ὥς Ἀρκείλαος, οὕτω γὰρ καὶ ἀνεπιστημοσύνη τῆς ἐπιστήμης αἴτια φανείται.

self. Accordingly, in his refutation of philosophical systems he is content with enumerating their mutual inconsistencies and contradictions.<sup>22</sup> So far his Scepticism is a single expression of that indecision which, at his time, prevailed throughout the whole domain of scientific inquiry, engendered as it were by its own weakness.

This Scepticism, however, like that of Pyrrho has also a practical tendency. This follows clearly from the mode of arguing which Arcesilaus employs against Zeno himself. Admitting with him that the true sage will follow no opinion, he proceeded to maintain that if the sage once assented to a thought he would thereby be following an opinion, and that, consequently, the sage must invariably withhold assent.<sup>23</sup> But now, as Arcesilaus admitted of a distinction between the sage and the fool, and as, according to his own principles, this cannot consist in knowing or not knowing; it must be taken in a purely practical relation. Accordingly, various practical precepts are ascribed to Arcesilaus. He censured the multitude of men as seeking eagerly to form a minutely correct estimate of works of art, instead of rigorously examining, as the sage ought, their own lives and conduct, which must afford to every one ample and interesting matter for reflection.<sup>24</sup> He considered poverty as an evil, it is true, but still as subservient to the exercise of virtue; <sup>25</sup> laws, too, became an object of

<sup>22</sup> Cic. Ac. i. 12.

<sup>23</sup> Ib. ii. 21. Si ulli rei sapiens assentietur unquam, aliquando etiam opinabitur; nunquam autem opinabitur, nulli igitur rei assentietur. Ib. 24; Sext. Emp. adv. Math. vii. 156.

<sup>24</sup> Plut. de Tranqu. An. 9.

<sup>25</sup> Stob. Serm. xcvi. 17.

his consideration, and he remarked, in something of the Platonic spirit, that where laws are many, offences are numerous.<sup>26</sup> But that he was far from regarding these maxims as constituting a science of practical life, is clear from his view of human knowledge. This he looked upon as falling within the domain of the probable, and taught as a general rule, that in the pursuit of good and the avoidance of evil, man must be guided by probabilities.<sup>27</sup> This we are inclined to look upon as the true distinction between the Sceptics and the members of the New Academy at its first formation by Arcesilaus. Whereas the former made the end of life to be the attainment of a perfect equanimity, and derived the difference between good and bad as presented by the phenomena of life, from convention and not from nature; the Academicians, on the contrary, refused to burst so violently all the bonds of life; they did not altogether submit to a course of conduct which, however unphilosophical, necessity enforced upon them, and which, in the moderation of the passions at most, allowed some vestiges of the reason to be traced; but they admitted that the sage, without absolutely mortifying his sensual desires, will live like any other in obedience to the

<sup>26</sup> Ib. xliiii. 91.

<sup>27</sup> Sext. Emp. adv. Math. ii. 158. ἀλλ' ἐπεὶ μετὰ τοῦτο ἔδει καὶ περὶ τοῦ βίου διεξαγωγῆς ζητεῖν, ἥτις οὐ χωρὶς κριτηρίου πέφυκεν ἀποδίδοσθαι, ἀφ' οὗ καὶ ἡ εὐδαιμονία, τουτέστι τὸ τοῦ βίου τέλος ἡρτημένην ἔχει τὴν πίστιν, φησὶν ὁ Ἀρκείλαος, ὅτι ὁ (vulg. οὐ) περὶ πάντων ἐπὶ χων κανονεῖ τὰς αἰρέσεις καὶ φύγας καὶ κοινῶς τὰς πράξεις τῷ εὐλόγῳ, κ. τ. λ. Numen. ap. Eus. Pr. Ev. xiv. 6, says, that Arcesilaus also taught the doctrine of the πιθανόν. This, in all probability, is an inference drawn from the impossibility that the probable can exist without the true, unless perhaps a still more subtle distinction is to be made between the εὐλογον and the πιθανόν.

general estimate of good and evil, but with this simple difference, that he does not believe that he is regulating his life by any certain and stable principles of science.<sup>28</sup> It is on this account that we do not meet with any statements concerning the strangeness of their habits and life, like to those about Pyrrho; on the contrary, Arcesilaus is usually depicted as a man who, in the intercourse of life, observed all its decency and proprieties, and was somewhat disposed to that splendour and luxury which the prevailing views of morality allowed and sanctioned.<sup>29</sup> His doubts, therefore, as to the possibility of arriving at a knowledge of the truth, may probably have had no other source than a high idea of science, derived, perhaps, from his study of Plato's works, and compared with which all human thought may have appeared at best but a probable conjecture.

This direction of thought was further carried

<sup>28</sup> The distinction, which, on the authority of Sext. Emp. Hyp. Pyrrh. i. 3, 226, 233; Gell. xi. 5, (*Academici quidem ipsum illud, nihil posse decerni, quasi decernunt; Pyrrhonii ne id quidem ullo pacto videri verum dicunt, quod nihil esse verum videtur*), is made to consist in this, that while the Academy maintained man cannot know anything, the Sceptics did not, certainly had no foundation in fact, at least in this form, as may be seen from Cic. Ac. i. 12. Sextus too, p. 226, takes the distinction in a different sense: *διαφέρουσι δὲ ἡμῶν προδήλως ἐν τῇ τῶν ἀγαθῶν καὶ τῶν κακῶν κρίσει· ἀγαθὸν γὰρ τί φασιν εἶναι οἱ Ἀκαδημαῖκοι καὶ κακὸν, κ. τ. λ.* It consists, therefore, in the reference of their Scepticism to practical life; indeed, one might suppose it to consist merely in this, that Arcesilaus placed all good in *ἐποχή*, ib. 233, were it not that the *εὐλογον* is too determinately referred to the choice of befitting actions. Sext. Emp. adv. Math. ii. 158. Sextus afterwards made yet another distinction, which, however, relates only to the doctrine of Carneades. The difference, however, seems to have been soon lost by the later Sceptics.

<sup>29</sup> Diog. Laert. iv. 40, 41; vii. 171. The praise of the Stoics does not contradict the censure of others, if we understand it in the spirit of the Stoical theory of Ethics.

out by the successors of Arcesilaus. Consequently, it was a purely external consideration that induced the ancients to draw a distinction between the Middle and the New Academy. For Lacydes transferred the usual place for the assembling of the school to a garden of the king Attalus Philometor, within the Academy, which hence obtained the name of Lakydeum, and to this unimportant circumstance the New Academy appears to owe its name.<sup>30</sup> In any other respect, neither he, nor his disciples Telecles and Evander, nor the latter's successor, Hegesinus or Hegesilaus,<sup>31</sup> were distinguished. It was Carneades the successor of Hegesinus that first restored the splendour of the Academy. Carneades<sup>32</sup> of Cyrene was born Ol. 141. 3, circ.<sup>33</sup> By Hegesinus he was instructed in the principles of the New Academy, whose lessons he diligently combined with the study of works of the Stoical school, and especially those of Chrysippus, being moreover the dialectic of the Porch by Diogenes the Babylonian.<sup>34</sup> Thus equipped with the weapons of the Stoics he soon exhibited himself as their most zealous opponent, and his labours in philosophy seems to have been confined to the single object of refuting all the positions of philoso-

<sup>30</sup> Ib. iv. 59, 60. Other accounts make the new Academy begin with Carneades.

<sup>31</sup> Ib. 60; Clem. Alex. Stom. i. p. 301.

<sup>32</sup> Compare J. J. Roulez, de Philosophia Carneadis, in *Annal. Acad. Gandav.* 1824—25.

<sup>33</sup> Diog. Laert. iv. 65. According to Apollodorus, he died Ol. 162. 4. eighty-five years old, Lucian, *Macrob.* 20; according to Cicero, *Ac. ii.* 6, he attained to the age of ninety.

<sup>34</sup> Diog. Laert. iv. 62; Euseb. *Pr. Ev.* xiv. 7; Cic. *Ac. ii.* 30.

phy by means of a learned acquaintance with its history and of great dialectical skill.<sup>35</sup> All his own importance was drawn from the doctrines and refutation of the Stoics, and this his twofold dependence upon them is well expressed by him in his usual assertion, "Had there never been a Chrysippus, I never should have been what I am."<sup>36</sup> In his attacks upon the Dogmatists he was greatly assisted by the grace, the elegance, and convincing flow of his eloquence<sup>37</sup>, his reputation for which occasioned his appointment as one of the ambassadors whom Athens sent to Rome on occasion of the destruction of Oropus. At Rome, many, mostly young men, were enchanted by his powers of oratory, which circumstance caused the elder Cato to insist that the ambassadors from Greece should be dismissed with all possible despatch, lest their prolonged stay should corrupt the youth of Rome.<sup>38</sup> It was here that he delivered his famous discourses for and against justice, it being his general custom first of all to speak in support, and then in opposition to philosophical doctrines.<sup>39</sup> In so doing, however, so little did he appear to incline to either side

<sup>35</sup> He is praised for his industry and learning. Diog. Laert. i. 1.; Cic. Ac. i. 12. As to the reported entering into the details of philosophy by Carneades, it may perhaps refer to the distinction which Sext. Emp. adv. Math. ix. 1, draws between the doctrines of the Sceptics and the method of Clitomachus: the latter, viz. refuting special doctrines, the former general principles.

<sup>36</sup> Diog. Laert. i. 1.

<sup>37</sup> Cic. de Orat. i. 11; Plut. v. Cat. Maj. 22; Numen. ap. Eus. Pr. Ev. xiv. 8; Gell. vii. 14.

<sup>38</sup> Cic. Ac. ii. 45; de Orat. ii. 37; Plut. v. Cat. Maj. 22, 23.

<sup>39</sup> Lactant. Div. Inst. v. 14. Among his arguments against the absoluteness of justice is the bold position which is directly advanced κατ' ἀνθρώπων, that if the Romans wished to be just, they would restore to all nations their own, and return to their huts. lb. 16. Cf. Cic. de Rep. iii. 6 sqq.

of the question that his most trusted pupil, Clitomachus, admitted that he never could discover what was the real opinion of his master.<sup>40</sup> It is to this Clitomachus that we are indebted for our knowledge of the lectures of Carneades, who committed nothing to writing,<sup>41</sup> but Clitomachus in his own works explained the opinions of his master.<sup>42</sup>

All the statements that we have on the subject, do not afford any grounds for believing that the doctrine of Carneades did not attach itself to that of Arcesilaus; for they are usually mentioned together, and it appears that Carneades only carried out further some of the views of the so-called middle Academy, and gave a slightly different sense to others. Most of the statements we have concerning him, refer to his refutation of the philosophemes of other schools, and especially those of the Stoical. His method of conducting the controversy was anything but unskilful, but the grounds of it were not original, being for the most part drawn from the doctrines of the earlier philosophers. This is the most fully seen in the arguments by which he sought to refute the doctrine of God, and which, from the circumstances of his age, are, for the most part, directed against the Stoics; but in some measures, he goes far beyond any Stoical principle on the subject; since these arguments are principally directed against the view that God, the eternal ground of all things, is a living substance, since such a being as this, the Stoics maintained, cannot

<sup>40</sup> Cic. Ac. ii. 45.

<sup>41</sup> Diog. Laert. Proœm. 16; iv. 65; Plut. de Alex. Fort. i. 4.

<sup>42</sup> Diog. Laert. iv. 67; Cic. Ac. ii. 31, 32.



be conceived of as without a body, both divisible and subject to affection and decay.<sup>43</sup> He also attacked the Stoics for their defence of the popular notions concerning the gods and soothsaying; <sup>44</sup>—as also their opinion of the necessity of whatever comes to pass, against which he appealed to the free volition of the human soul.<sup>45</sup> Thus, too, he attacked with great dexterity the somewhat clumsy way in which the Stoics had sought to establish that all in nature has end for man.<sup>46</sup> All these points, however, relate to physical doctrines; but Carneades was less diligent with Physics than with Ethics.<sup>47</sup> And, in fact, he appears to have laboured in the latter to give a systematic refutation of all the principles of preceding philosophical schools. Practical life he regarded as an art; now every art has some work to accomplish; and so the natural instinct of man impels him to some work or other agreeable to his nature. But the only question is, what is this work? and all opinions on this subject may be reduced to three heads, of which one is pleasure, a second freedom from pain, and a third those primary requisitions of nature which contain the germ of virtue as the work of life. Under the third head he appears to have placed the doctrines

<sup>43</sup> Cic. de Nat. D. iii. 12—14; Sext. Emp. adv. Math. ix. 140. Tennemann, Hist. of Phil. 4. p. 347 sq., ascribes to Carneades all the arguments against the existence of a God, which are adduced by Sextus, 137, sqq. This does not seem to be altogether justifiable; on the other hand, however, he does appear to have defended atheism and the doctrine that the world owes its origin to chance. Cic. de Div. i. 13; Theophil. ad Autol. iii. 5.

<sup>44</sup> Sext. Emp. ib. 182 sq.; Cic. de Nat. D. iii. 17; de Div. i. 4, 7, 13; ii. 3, 41.

<sup>45</sup> Cic. de Fato, 11, 14.

<sup>46</sup> Porphy. de Abstin. iii. 20 p. 261 en. Rhoer.

<sup>47</sup> Diog. Laert. iv. 62.

of the first Academy and of Aristotle, from which, he asserted, the Stoics differed in words only, and not in things. The reader must at once perceive how very inaccurate and superficial all this is. As to the sceptical arguments advanced by Carneades against these different moral views, none of them have been preserved to us. He himself appears to have been disposed to take a nobler view of humanity than that of Aristippus, but less exalted than that of the Stoics.<sup>48</sup> For it has been pretended that his orations evince a disposition to approve of, without, however, actually adopting, the third of the three views of human nature which we have already detailed.<sup>49</sup> Nevertheless his scepticism was still stronger even in this part of philosophy, and inspired him with doubts as to the conformity of the moral ideas with nature. This is strongly shown by his oration against justice, the object of which was to prove that justice is not by nature but merely by civil institution. For, it is there argued, if justice were by nature, then it would be identical everywhere; but it is a well-known fact that law and justice differ, not only in different, but even in the same states at different periods and for different ranks. For this reason, he also argues, justice cannot be a virtue, for virtue is ever one and invariable.<sup>50</sup> This also follows from the fact, that the virtue of prudence is often at issue

<sup>48</sup> Cic. de Fin. iii. 17; v. 8.

<sup>49</sup> Ib. ii. 11; iii. 12; v. 6—8; Ac. ii. 45.

<sup>50</sup> Cic. de Rep. iii. 1. Jus enim, de quo quærimus, civile est aliquod, naturale nullum; nam si esset, ut calida et frigida et amara et dulcia, sic essent justa et injusta eadem omnibus. Ib. 10, 11. At nec inconstantiam virus recipit, nec varietatem natura patitur.

with that of justice. It is frequently the height of imprudence for states as well as individuals to follow the dictates of justice; no one would wish to be just in cases where his very justice would entail upon him the imputation of injustice.<sup>51</sup> Consequently, the source of justice is neither nature nor reason, but the weakness of man. For man is at liberty to choose between three cases open to him; either to commit injustice but not to suffer it, or both to commit and to suffer it; or lastly, neither to submit to it himself nor inflict it on others. But, now, as the individual is not strong enough for the first, and the second involves the greatest misery, consequently, the third case is chosen, and men consent to submit in common to the restraint of laws for the sake of the protection they afford to all alike.<sup>52</sup> Now, although these arguments are, it is true, advanced in a sceptical spirit, nevertheless, the manner in which Carneades treats throughout of the question of justice, appears to throw a greater doubt upon the questions of morals than Arcesilaus was disposed to do, who admitted that there is a good and an evil by nature, although they are indeterminable by the weakness of human reason. It is evident, therefore, that in this respect Carneades deviated to a greater extent from the Platonic doctrines than the so-called middle Academy.

<sup>51</sup> Ib. 9, 12, 15, 17, 19, 20.

<sup>52</sup> Ib. 14. Etenim justitiæ non natura, nec voluntas, sed imbecillitas mater est. Nam cum de tribus unum esset optandum, aut facere injuriam, nec accipere, aut facere et accipere, aut neutrum, optimum est facere, impune si possis, secundum nec facere nec pati, miserrimum digladiari semper tum faciendis, tum accipiendis injuriis.

But all these are merely special points of a controversy which had its ground on a general view of human thought. Agreeably to this view Carneades laboured to prove that all previous attempts of philosophy to establish a criterion of truth had miscarried, and moreover, that it was impossible to find such a criterion. For, he argued, it must be placed either in sensation, or in conception, or in reason. Now as to the last, he maintained that it could not be found in reason independently of both sensation and conception, for that which is the object of any judgment of the reason must first appear to the mind in a conception, which is impossible unless it has been first of all presented to it by some irrational sensation ; so that every operation of the reason is originally dependent upon sensation, which is irrational, and consequently the truth of rational cognition depends on that of sensation.<sup>53</sup> This reasoning was designed as a refutation of the Platonic, and perhaps also of the Aristotelian, theory of knowledge ; it must be confessed, however, that Carneades, in obedience to the prevailing opinions of his times, does not seem to have considered the task a difficult one.<sup>54</sup> He naturally found it still more easy

<sup>53</sup> Sext. Emp. adv. Math. vii. 160. *ἐπεὶ γὰρ αἰσθητικῇ δυνάμει διαφέρει τὸ ζῷον τῶν ἀψύχων, πάντως διὰ ταύτης ἑαυτοῦ τε καὶ τῶν ἐκτὸς ἀντιληπτικὸν γενήσεται.* Ib. 165. *μηδεμιᾶς δὲ οὐσης φαντασίας κριτικῆς οὐδὲ λόγος ἂν εἴη κριτήριον. ἀπὸ φαντασίας γὰρ οὗτος ἀνάγεται. καὶ εἰκότως· πρῶτον μὲν γὰρ δεῖ φανῆναι αὐτῷ τὸ κρινόμενον· φανῆναι δὲ οὐδὲν δύναται χωρὶς τῆς ἀλόγου αἰσθήσεως.*

<sup>54</sup> In refutation of intellectual knowledge objections might have been advanced, such as that against the position that if two magnitudes are equal to a third, they are also equal to each other. Galen. de Opt. Disc. 2. p. 17. The disposition of Carneades to derive the ground of all cognition from sensation,

to refute doctrines, like those of the Stoics, which derived all knowledge from sensation and conception. All his arguments, with this view, remount ultimately to this, that it is impossible to distinguish a true sensuous perception or conception from a false one. Carneades, however, in his reasoning on this matter, appears to have followed Chrysippus in drawing a nicer distinction, than his predecessors did, between that element in the sensation and conception which belongs to the sensible and conceivable object, and that which pertains to the sentient and conceiving subject. After Chrysippus, he observed, that the conception itself reveals its objects in the same manner as light manifests both itself and its object; but that every sensation does not represent its object such as it really is, but, like a bad messenger, conveys false tidings; and on this account simply it cannot be the criterion of truth, but that the true sensation alone can be the right standard of verity.<sup>55</sup> Now there is no true conception of such a nature that it cannot at times be a false one, and therefore, generally, no sensation soever can be regarded as the standard of truth.<sup>56</sup> In support of this assertion Carneades appears to have adduced several special arguments derived

is strongly betrayed by his declaration that instead of denying senses to God, men ought to ascribe to him more than five, in order that he might be the better able to know all things. Sext. Emp. adv. Math. ix. 140.

<sup>55</sup> Ib. 161 sqq. ὅθεν καὶ φαντασίαν ῥητίον εἶναι πάθος τί περὶ τὸ ζῶον, ἑαυτοῦ τε καὶ τοῦ ἑτέρου παραστατικόν κ. τ. λ. — ἀλλ' ἔπει οὐ τὸ κατ' ἀλήθειαν αἰεὶ ποτε ἰνδείκνυται (sc. ἡ φαντασία), πολλάκις δὲ διαψεύδεται καὶ διαφωνεῖ τοῖς ἀναπίμψασιν αὐτὴν πράγμασιν, ὥς οἱ μοχθηροὶ τῶν ἀγγέλων, κατὰ ἀνάγκην ἠκολούθησε τὸ μὴ πᾶσαν φαντασίαν δόνασθαι κριτήριον ἀπολείπειν ἀληθείας, ἀλλὰ μόνην εἰ καὶ ἄρα τὴν ἀληθῆ.

<sup>56</sup> Ib. 164, 402; Numen. ap. Eus. Pr. Ev. xiv. 8.

principally from the so-called illusions of sense, and partly from an appeal, after the manner of Plato,<sup>57</sup> to the fleeting nature of sensations, and the consequence which follows therefrom, that sensation is nothing but a phenomenal and a passive state of things.<sup>58</sup>

Perhaps, too, in order to prove the illusory nature of all sensuous representations, he appealed to the indeterminateness of all distinctions of magnitude; for we find him ridiculing the method by which Chrysippus sought to get rid of the difficulties presented by the so-called sophism of the heap.<sup>59</sup> All these positions concerning the delusion of sensuous perception, and of the difficulty of distinguishing between true and false representations, are, however, advanced in a sceptical spirit, and accordingly he refused to admit it to be a fact of certainty, even that nothing can be known.<sup>60</sup>

Connected with these doubts of Carneades as to the possibility of knowing the truth, was his doctrine of probability. The object of this doctrine is to satisfy the feeling that, notwithstanding this uncertainty of all things, man cannot altogether withhold his assent, for otherwise the conduct of life would be impossible. Carneades, agreeing with Arcesilaus in his opposition to the Sceptics, refused to admit the constraining power of any blind and

<sup>57</sup> Sext. Emp. ib. 160 sq.

<sup>58</sup> Ib. 161. τοῦτο δὲ τὸ πάθος αὐτοῦ ἐνδεικτικὸν ὀφείλει τυγχάνειν καὶ τοῦ ἐμποιήσαντος αὐτὸ φαινομένου, ὅπερ πάθος ἐστὶν οὐχ ἕτερον τῆς φαντασίας.

<sup>59</sup> Cic. Ac. ii. 29.

<sup>60</sup> Ib. 9. Qui enim negaret, quicquam esse, quod perciperetur, eum nihil excipere; ita necesse esse ne id ipsum quidem, quod exceptum non esset, comprehendi et percipi ullo modo posse.

necessary impressions on the senses, but insisted on the possibility of a rational choice between opposite courses of conduct. This choice, he however maintained, does not rest on any principle of real science, but simply on higher or lower degrees of probability.<sup>61</sup> Now the theory of probability, like the scepticism of Carneades, is founded ultimately on the distinction between that element of thought which is relative to the object, and that to the thinking subject. Every idea or representation has two relations, (*σχέσις*), one to the object presented, and another to the presenting subject. In the former relation it is true, when it agrees with the object; and contrariwise false; in the latter, it appears either as true or not; and in the first case it is called probable, in the latter improbable.<sup>62</sup> Now as Carneades was of opinion that nothing can be determined with respect to the agreement or disagreement of ideas with their objects, it was of importance to fix the distinction between probable and improbable ideas. For this purpose he distinguishes certain degrees of probability. An idea or representation, in and by itself, is probable if it results from an invariable perception, i. e. from one

<sup>61</sup> Ib. 31; Sext. Emp. ib. 166.

<sup>62</sup> Ib. 167. ἡ τοίνυν φαντασία τινὸς φαντασία ἐστίν, οἷον τοῦ τε ἀφ' οὗ γίνεται καὶ τοῦ ἐν ᾧ γίνεται. καὶ ἀφ' οὗ μὲν γίνεται ὡς τοῦ ἐκτὸς ὑποκειμένου αἰσθητοῦ· τοῦ ἐν ᾧ δὲ γίνεται, καθάπερ ἀνθρώπου. τοιαύτη δὲ οὐσα δύο ἂν ἔχοι σχέσεις· μίαν μὲν πρὸς τὸ φανταστόν, δευτέραν δὲ ὡς πρὸς τὸν φαντασιούμενον· κατὰ μὲν οὖν τὴν πρὸς τὸ φανταστόν σχέσιν ἡ ἀληθὴς γίνεται, ὅταν σύμφωνος ᾖ τῷ φανταστῷ, ψευδὴς δέ, ὅταν διάφωνος. κατὰ δὲ τὴν πρὸς τὸν φαντασιούμενον σχέσιν ἡ μὲν ἐστὶ φαινομένη ἀληθής, ἡ δὲ οὐ φαινομένη ἀληθής· ὣν ἡ μὲν φαινομένη ἀληθὴς ἐμφασίς καλεῖται παρὰ τοῖς Ἀκαδημαϊκοῖς καὶ πιθανότης καὶ πιθανή φαντασία· ἡ δὲ οὐ φαινομένη ἀληθὴς ἀπέμφασίς τε προσαγορεύεται καὶ ἀπειθὴς καὶ ἀπίθανος φαντασία. Cic. Ac. ii. 31.

which does not exercise on the assent greater or less force of conviction, according to any relations of the subject to the object, or from the distance or proximity, magnitude or minuteness, the acuteness of the senses, and the like.<sup>63</sup> But, in the second place, as a single idea is never presented alone, but is always in some combination with others, which either confirm or contradict it, every idea is probable which has its source in some unquestioned perception; this is that idea which is not tossed to and fro by doubt, (*ἀπερίσπαστος*), which has greater probability than that which is only probable in itself.<sup>64</sup> Lastly, Carneades held that all ideas acquire the more probability the more thoroughly they have been investigated, as well in their several parts as in the relations to the subject out of which they arose, (*διεξωδευμένη φαντασία*), and without any circumstance being discovered which may militate against their probability. Accordingly, the highest degree of probability is possessed by an idea which, after being analysed in itself, and tested in all possible combinations with others, appears to be wholly devoid of improbability.<sup>65</sup>

Such was the method of probabilities advanced by Carneades. If we proceed to inquire what was its object, we find that it professed to give a rule of practical life; <sup>66</sup> yet it is evident that the inter-

<sup>63</sup> Sext. Emp. ib. 171.

<sup>64</sup> Ib. 176 sqq.; Cic. Ac. ii. 11. *Visionem—probabilem et quæ non impediatur.* Ib. 31, 32.

<sup>65</sup> Sext. Emp. ib. 181. The three grades are given briefly by Pyrrh. Hyp. i. 227. *τὰς μὲν γὰρ αὐτοὶ μόνον πιθανὰς ἡγοῦνται, τὰς δὲ πιθανὰς καὶ περωδευμένας καὶ ἀπερίσπαστους.* Cic. Ac. ii. 11; Galen. de Hipp. et Plat. Plac. ix. p. 266.

<sup>66</sup> Sext. Emp. adv. Math. vii. 184 sqq.



ests of practical life stood in need of no such a rule of conduct ; and if such were really the object of Carneades, we may well ask why he did not apply his own doctrine of probability in his orations on and against justice ; and why he has made that against justice to be last. It is at least clear that by adopting the order he has, he did little to promote morality and virtue. We are therefore fully justified in suspecting that he had covert ends in view under his avowed object, and which the general spirit of Carneades' opinions readily betrays. His skill in the composition of long and ingenious discourses for and against any subject, his preference for ethics over physics, as more suitable for rhetorical display, and lastly, his careful investigations of all possible means by which any opinion may be shown to be probable, indicate more anxiety for the advancement of oratory than of truth. To pretend to trace the doctrines of this member of the New Academy up to Plato, would be to do him too high an honour ; for his theory of probability reduced all conviction from the senses, and only differs from the Stoical theory of cognition in that it refuses to admit that the evidence of the senses is of irresistible force, and leads to true certainty. Even the ground of his scepticism is not, like that of the Pyrrhonists, drawn from the contradictions of the sensible and the intelligible, but from the possible delusion of the sensuous impressions.

With Carneades the New Academy arrived at the height of its splendour. His immediate disciple, Clitomachus of Carthage, is mentioned merely

as a faithful adherent to his master's opinions.<sup>67</sup> Charmidas, one of the scholars of Clitomachus, and as sceptical as Carneades, recommends the study of philosophy as the best and only road to oratory,<sup>68</sup> and therein openly avows the true end of the doctrine of probabilities. These teachers do not appear to have supported the splendour of the Academy; on the contrary, it fell more and more into disrepute. We are here evidently fast approaching near to the close of the present period of our history, and in this degradation of philosophy to simply artistic purposes, we see its corruption assuming the same form as it took on an earlier occasion. But in the present case the phenomenon is of a more complicated nature than that which marked the dissolution of the pre-Socratic schools, since in the course of time the civilisation and science of the Greeks had become more manifold and diversified in its objects. But a few facts still remain to be noticed, and then we have at once before our view whatever is characteristic of this point in the development of philosophy.

Returning to the Stoics, whose history is throughout mixed up with that of the New Academy, the phenomena we have to notice are of a similar kind, but of a somewhat different tendency.<sup>69</sup> While the Academy insensibly became more dogmatical, the

<sup>67</sup> Diog. Laert. iv. 67; Cic. Ac. ii. 32.

<sup>68</sup> Cic. de Orat. i. 18. According to Sext. Emp. adv. Math. ii. 20 sqq., Clitomachus and Charmidas opposed rhetoric, but naturally that only which rested on philosophy.

<sup>69</sup> See in Polybius the characteristic censure of the New Academy. Exc. Vat. xii. 26.

Porch assumed a sceptical cast ; but both agreed in giving a character of mere erudition to philosophy, and in rendering it the handmaid of oratory. Panætius of Rhodes, the scholar and successor of Antipater, the friend of Scipio Lælius and other eminent Romans, is distinguished from the earlier Stoics by a less rigorous method of communicating philosophy and freedom from subtle scholastic division, by his rhetorical manner and familiar style, adapted to the comprehension of the many.<sup>70</sup> The latter rendered him well fitted to be the means of introducing philosophy to the Romans. Many of the lawyers of Rome are said to have been his pupils, for whom he is reported to have composed a treatise on the state in a popular form, with a view of facilitating the study of the civil law ;<sup>71</sup> and with him the influence of the Stoics on the scientific form of Roman jurisprudence appears to have commenced. A proof of his fondness for the rhetorical art is afforded by his assertion that an advocate is at liberty to defend the probable, even though it be not altogether true.<sup>72</sup> Agreeably to the rhetorical and popular character of his mind, he employed himself less with logic and physics than with moral questions. In logic he appears, although the disciple of Crates of Mallos,<sup>73</sup> to have confined his at-

<sup>70</sup> Cic. de Fin. iv. 28. Compare Van Lynden de Panætio Rhodio. Lugd. Bat. 1802.

<sup>71</sup> Cic. de Leg. iii. 6. As to the Roman juriconsults who were his scholars, consult Van Lynden, p. 50 sqq.

<sup>72</sup> Cic. de Offic. ii. 14. *Judicis est, semper in causis verum sequi, patroni, nonnunquam verisimile, etiamsi minus sit verum, defendere ; quod scribere (præsertim cum de philosophia scriberem) non auderem, nisi idem placeret gravissimo Stoicorum, Panætio.*

<sup>73</sup> Strab. xiv. 5. p. 232.

tention principally to grammar,<sup>74</sup> which he considered of importance for his rhetorical pursuits. Of his physical opinions we know very little, but enough to show that he deviated essentially from the Stoics, and to render it probable that he sought to reconcile, by a very few slight alterations, the Stoical view with that of earlier philosophers. We are told of him that he held Plato in especial esteem, and styled him the Homer of Philosophy; that at the same time he constantly quoted with deference the authorities of Aristotle, Xenocrates, Theophrastus, and Dicæarchus, and strongly recommended a work of Crantor.<sup>75</sup> Two only of his physical works have come down to us by name, and of these the one on soothsaying is of purely negative character, for he denied, or at least questioned, the possibility of predicting future things;<sup>76</sup> which refutation of heathen superstition is directly opposed to the spirit of the Porch. His other physical work, on Providence, seems to have been of a more positive character, but in all probability there was much in it that was purely negative. At least he assented to some of the earlier Stoics, who rejected the doctrine of the mundane conflagration, and began to question the Stoical division of the soul. For he only admitted of six parts of the soul, referring the faculty of speech to that of voluntary motion, and insisted that that of generation belongs not to the soul but to the vegetable nature.<sup>77</sup>

<sup>74</sup> Van Lynden, p. 66 sq.

<sup>75</sup> Cic. de Fin. iv. 28; Tusc. i. 32; Ac. ii. 44.

<sup>76</sup> Cic. de Div. i. 3; Ac. ii. 33; Diog. Laert. vii. 149.

<sup>77</sup> Nemes. de Nat. Hom. 15. p. 96. Παναιρίως δὲ ὁ φιλόσοφος τὸ μὲν φω-

He perhaps was not conscious that he thereby called into question the fundamental thought of the Stoical division, which essentially amounts to this, that every faculty of the soul, so far as it extends from the leading faculty through some special and sensuously perceptible member, corresponds to a special and separate faculty of the soul. Of the ethical doctrines of Panætius we possess fuller information than of his physics; and they constitute his glory, for he was the author of the celebrated treatise "On the Becoming" which Cicero, with some modifications, adapted to the Roman public in his work *De Officiis*. Thus it is with the Stoics as with the New Academy; the more rhetorical philosophy became, the more was physics neglected and ethics cultivated. But even in the subject of morals Panætius appears to have greatly remitted from the severity of the older Stoics. The chief features of their general theory he indeed verbally retained, but gave to the very ambiguous formula, that man must follow the dictates of nature, an essentially altered meaning;<sup>78</sup> and although he taught, with the Stoics, that virtues collectively pursue the same end, although by different ways,<sup>79</sup> still the leading point in such a view was left by him wholly undetermined; and, indeed, his division of virtues into theoretical and practical,<sup>80</sup> appears to be more applicable to the Aristotelian than to the Stoical

*νητικὸν τῆς καθ' ὁρμὴν κινήσεως μέρος εἶναι βούλεται, λίγων ὀρθότατα· τὸ δὲ σπερματικὸν οὐ τῆς ψυχῆς μέρος, ἀλλὰ τῆς φύσεως.*

<sup>78</sup> Clem. Alex. Strom. ii. p. 416; Stob. Ecl. ii. p. 114.

<sup>79</sup> Stob. Ecl. ii. p. 112.

<sup>80</sup> Diog. Laert. vii. 92.

ethics. He preserves to his system the colour of the Stoical severity, chiefly by maintaining that whatever is good is also profitable, and whatever is profitable is also good ;<sup>81</sup> still even this does not constitute any essential difference of doctrine from the Platonic and Aristotelian. On the other hand, he openly deviated from the doctrine of the Porch, by admitting that some pleasures are agreeable to, but others contrary to nature ;<sup>82</sup> and that wisdom is not all-sufficient for happiness, but that we stand in need of health, power, and wealth, for all necessary expenditure.<sup>83</sup> In the same manner he rejected the apathy of the sage<sup>84</sup> as unnatural, and was evidently disposed to soften the severity of the Stoical ethics when, in deference to the weakness of humanity, he allowed that the laws which are valid for the sage are ill-suited for common men.<sup>85</sup> We do not deny that Panætius may have had good grounds for attempting such modifications of the Stoical doctrine ; still, in his manner of combining together essentially different doctrines, he betrays a superficial habit of mind, which, incapable of remounting to the first grounds of systems, could yet believe that, setting principles aside, it is possible to interchange consequences.

The most eminent of the disciples of Panætius was Posidonius of Apamea, who held a philosophical school at Rhodes, where he had Pompey and Cicero for his hearers, and was the most learned of

<sup>81</sup> Cic. de Off. iii. 7.

<sup>82</sup> Sext. Emp. adv. Math. xi. 73.

<sup>83</sup> Diog. Laert. vii. 128.

<sup>84</sup> Gell. xii. 5.

<sup>85</sup> Senec. Ep. 116.

the Stoics.<sup>86</sup> This person was in many ways distinguished; his best services were exerted in the cause of politics and science; partly by personal travels, and partly by other means, he acquired historical and geographical information of great extent; he diligently studied mathematics;<sup>87</sup> and in physics he investigated, more accurately than the other Stoics, the causes of individual natural phenomena, in which he attached himself to the authority of Aristotle,<sup>88</sup> without, however, deferring to it on all points. He resembled his teacher in his desire to influence and improve the science of legislation,<sup>89</sup> and in the rhetorical character of his style.<sup>90</sup> In philosophy also he followed a course which Panætius had previously entered upon, and even still more decidedly. He made, it is true, the Stoical doctrine the basis of his own philosophy, but at the same time he considered it possible to combine it with that of Plato, Aristotle, and others. Thus he is charged with Aristotelising;<sup>91</sup> he wrote a commentary on the *Timæus* of Plato;<sup>92</sup> on the question of the division of the soul he opposed Chry-

<sup>86</sup> Strabo, xiv. 2, p. 199; xvi. 2, p. 360; Cic. de Nat. D. i. 3; Tusc. ii. 25. As to Posidonius, consult Bake, *Posidonii Rhodii reliquæ doctrinæ*. Lugd. Bat. 1810.

<sup>87</sup> As to his mathematical and historical acquirements consult Bake, p. 87 sqq.; p. 133 sqq.; as to his mathematical studies, see ib. p. 178 sqq.

<sup>88</sup> Strab. ii. 3 fin. p. 164.

<sup>89</sup> Senec. Ep. 94.

<sup>90</sup> Strab. iii. 2, p. 235. His rhetorical manner may be distinctly inferred from the story of the proofs which he is said to have given Pompey of his art. Cic. Tusc. ii. 25. What Senec. Ep. 90, also says of his manner of ascribing all inventions to philosophy, must also have been owing to his rhetorical habit of thought.

<sup>91</sup> Strab. ii. 3 fin. p. 164.

<sup>92</sup> Sext. Emp. adv. Math. vii. 93.

sippus, and believed that he was agreeing with Zeno and Cleanthes, when he followed Plato and Aristotle; <sup>93</sup> he is without any ill-will, like the elder Stoics, against Democritus, whom he even enumerates among those of philosophers whose inventions have enriched and improved human life; <sup>94</sup> he even approximated to and adopted parts of the Pythagorean system of numbers.<sup>95</sup> In short, we have instanced sufficient to show that Posidonius was decidedly forming an attempt to banish all inconsistencies from philosophy by a skilful blending of the doctrines of olden philosophers. To such an attempt he was perhaps impelled by the objections which the New Academy and other skilful adversaries brought against philosophy, who looked upon the disagreements of its teachers as sufficient ground for the censure of the science itself; at least he asserted that whoever abandons philosophy on account of the inconsistencies of its professors, might have the same ground for abandoning life.<sup>96</sup> This suggests the remark that Posidonius seems, in the consciousness of present weakness, so general among the Stoics, to have been disposed to look to the historical past for a greater vigour of philosophy.<sup>97</sup> This, as a self-consciousness of the

<sup>93</sup> Galen. de Hipp. et Plat. Plac. iv. p. 143; v. p. 171; p. 206; viii. p. 227.

<sup>94</sup> Senec. l. l.

<sup>95</sup> Sext. Emp. l. l.; Theo Smyrn. de Mus. 46, p. 162; Galen. de Hipp. et Plat. Plac. v. p. 171; Plut. de Procr. An. 22; Epit. Comment. de An. Procr. 3.

<sup>96</sup> Diog. Laert. vii. 129. δοκεῖ δὲ αὐτοῖς μήτε τὴν διαφωνίαν ἀφίστασθαι φιλοσοφίας, ἐπεὶ τῷ λόγῳ τούτῳ προλείπειν ὅλον τὸν βίον. The sense is clear although the passage is very corrupt. The conjecture of Bake, who would introduce μήτε after διὰ, is probable.

<sup>97</sup> Senec. l. l.



growing weakness of philosophy is significant. Indeed Posidonius was so far advanced on this route, as to be disposed to find the source and origin of Greek philosophy out of oriental tradition.<sup>98</sup>

In his attempt to reconcile the Stoical doctrine with the older systems of philosophy he was led to deviate considerably from the latter, notwithstanding on some points he abandoned the opinions of Panætius for a more strict adherence to the principles of the Porch. Thus he defended the claims of soothsaying, and exposed at length the principles on which it rests;<sup>99</sup> he moreover asserted that the world had both a beginning and an end.<sup>100</sup> But even in these doctrines, Posidonius seems to have differed on some essential points from the Stoics. For the end of the world, he supposed, would be a resolution of all things into void; which implies that, in direct contradiction to the spirit of the Stoical doctrine, he regarded this mundane existence as more perfect than the dissolution of the world, and moreover did not, like the other Stoics, posit vacuum as infinite, but ascribed to it a definite magnitude, which he limited to the measure of what was necessary to admit of the resolution of the world into it.<sup>101</sup> This change of view appears to require as its condition a total modi-

<sup>98</sup> Sext. Emp. adv. Math. ix. 363; Strab. xvi. p. 367.

<sup>99</sup> Diog. Laert. vii. 149; Cic. de Div. i. 30, 55 sq.

<sup>100</sup> This, it is true, is opposed by Philo, de Mundi Ætern. p. 497; as, however, it is supported by several other passages, I am inclined to suppose that the name of Posidonius has been introduced here by mistake.

<sup>101</sup> Eus. Pr. Ev. xv. 40. οἱ δὲ Στωικοί, εἰς δὲ καὶ ἐν τῇ ἐκφυρώσει ἀναλύεται ἄπειρον. Ποσειδώνιος οὐκ ἄπειρον, ἀλλ' ὅσον αὐταρκὲς εἰς τὴν διάλυσιν, ἐν τῷ πρώτῳ περὶ κενοῦ. Plut. de Pl. Ph. ii. 9; Stob. Ecl. i. p. 390; Diog. Laert. vii. 142.

fication of the contrariety which the Stoics placed between the corporeal and the incorporeal. Whether, however, this was ever made appears to us to be questionable; on the other hand, we have full authority for asserting that Posidonius revived the Platonic division of the mental faculties. But from the same authority, that against the opposite theory of Chrysippus, he was content with simply developing Plato's own arguments. He was of opinion that in order to establish the doctrine of the soul's passive state, there is no need of any lengthy arguments or reasonings; but simply to appeal to the memory of all men of their own passions and sufferings;<sup>102</sup> and that as to the doctrine of Chrysippus it directly contradicted phenomena and experience.<sup>103</sup> Nevertheless, the intention of Posidonius is not simply the determination of phenomena, but the explanation of them and their principles. Like Plato he appealed to the conflict of the reason with the passions,<sup>104</sup> to the presence of desire and anger in children and irrationals;<sup>105</sup> to the fact that the sage himself is subject to a passive motion when he feels a longing for any object that he desires.<sup>106</sup> As for Chrysippus, he thought he could easily refute him by demanding to what principle could he refer excessive desire, and the indisposition of the soul in certain passive emotions;<sup>107</sup> or how it is possible to explain the fact that the same concep-

<sup>102</sup> Galen. de Hipp. et Plat. Plac. v. p. 178.

<sup>103</sup> Ib. iv. p. 143.

<sup>104</sup> Ib. p. 153. Cf. ib. p. 167.

<sup>105</sup> Ib. v. p. 153, 165, 167.

<sup>106</sup> Ib. iv. p. 145.

<sup>107</sup> L. l.

tions and thoughts do at one time excite an emotion but at another not; <sup>108</sup> for he failed to observe that the theory of Chrysippus rested on a very different ground than the observation of such facts. Indeed the whole view of Posidonius began to deviate essentially from the Stoical system when he derived the soul's passive emotions from corporeal combinations and outward influences, and especially when he sought to demonstrate the same by a supposed agreement between the bodily constitution and the mental temperament, and the influence of country and education, upon the manners of a people.<sup>109</sup> This in fact is the very ground of his doctrine. He distinguishes between certain corporeal and mental states of man, as well as between those which pass from the soul to the body, and those which arrive from the body to the soul. With the latter he appears to have classed desire, and even conception was assigned by him to this class; whereas it was from the soul into the body that he derived those changes in fear and pain, in which he probably placed the moving causes of anger.<sup>110</sup> This view is inconsistent with the Stoical

<sup>108</sup> Ib. p. 146.

<sup>109</sup> Ib. v. p. 166 sq. ὡς τῶν παθητικῶν κινήσεων τῆς ψυχῆς ἐπομένων ἀεὶ τῇ διαθείσει τοῦ σώματος. ἦν ἐκ τῆς κατὰ τὸ περιέχον κράσεως οὐ κατ' ὀλίγον ἀλλοιοῦσθαι, κ. τ. λ.

<sup>110</sup> Plut. Fragm. i. 6. The fragment is greatly mutilated, so that the import of the division can only be guessed. ὃ γὰρ τοι Ποσειδώνιος τὰ μὲν εἶναι ψυχικά, τὰ δὲ σωματικά· καὶ τὰ μὲν οὐ ψυχῆς, περὶ ψυχὴν δέ\*• ἀπλῶς τὸ κρίσις καὶ ὑπολήψεις· οἷον μὲν ἐπιθυμίας λίγων, φόβους, ὀργάς. σωματικά δὲ ἀπλῶς πυρετούς, περιψύξεις, πυκνώσεις, ἀραιώσεις· περὶ ψυχὴν δὲ σωματικά ληθάρρους, μελαγχολίας, δημούς, φαντασίας, διαχύσεις· ἀνάπαλιν δὲ περὶ σῶμα ψυχικά τρόμους καὶ ὠχριάσεις καὶ μεταβολὰς τοῦ ἥθους κατὰ φόβον ἢ λύπην.

theory, which tended directly to conceive of the rational man as of a unity, all of whose operations proceed from, and are subject to the reason as the dominant portion of the soul. Posidonius, on the contrary, regarded man as a compound creature, in whom desire corresponds to vegetable life, anger to the brutish, but reason is the peculiar property of man; <sup>111</sup> while the elder Stoics, agreeably to the predominant character of their doctrine, derived the unity of all these forces in the higher force of reason, of which they looked upon every vital activity and impulse as emanations. Posidonius, indeed, seems himself to have been of opinion that all the mental forces have some substance for their centre; <sup>112</sup> yet it is difficult to see how he could reconcile such a view with his supposition that certain states of the individual come to the central soul from the circumjacent body, while others pursue an opposite course. In other respects, however, we must not suppose that if Posidonius attached himself herein to the authority of Plato, he naturally adopted the ideas of the Platonic division. And we gravely suspect the correctness of the assertion that he considered the doctrines of Zeno and Aristotle to be coincident with that of Plato; for such an assertion would be absurd in the absence of a great modification of the Stoical view of the soul, to which Posidonius appears to have been little dis-

<sup>111</sup> Galen. *ib.* p. 170. ὅσα μὲν οὖν τῶν ζώων δυσκίνητ' ἐστὶ καὶ προσπεφυκότα δικῇν φυτῶν πέτραις ἢ τισιν ἑτέροις τοιοῦτοις, ἐπιθυμίᾳ μόνῃ διοικεῖσθαι λέγει αὐτά, τὰ δ' ἄλλα ἄλογα σύμπαντα ταῖς δυνάμεσιν ἀμφοτέραις χρῆσθαι, τῇ τε ἐπιθυμητικῇ καὶ τῇ θυμοειδεῖ, τὸν ἄνθρωπον δὲ μόνον ταῖς τρισί· προειληφέναι γὰρ καὶ τὴν λογιστικὴν ἀρχήν.

<sup>112</sup> *Ib.* p. 182. δυνάμεις — μιᾶς οὐσίας ἐκ τῆς καρδίας ὁρμωμένης.

posed, since otherwise he would have had to attack many other of their doctrines, such as the corporeity and mortality of the soul.

This change of the Stoical psychology naturally gave rise to a change of the fundamental position on which the moral theory of this school rested; for, as Posidonius rightly observed, all moral ideas are dependent upon the view which is entertained of the nature of the soul.<sup>113</sup> All, however, that we are told on this head is too vague to enable us to form a correct estimate of his ethical doctrine. It would appear that he followed Plato in insisting on the perfect harmony of the soul in all its parts, without, however, extending this harmony to the soul's connection with the universe. For thus alone can we explain the laxer character of his moral theory as well as that of his teacher Panætius; for Posidonius also denied that virtue alone is all-sufficient for happiness.<sup>114</sup> This less rigorous tendency is likewise shown by his maintaining the validity of the Stoical position that nothing but the moral is good, in an individual rather than in a universal sense, when he asserted that the general good must be postponed to the morality of the individual. That is, he held certain actions to be so base that no one ought to perform them, for the sake even of the greatest common good;<sup>115</sup> in which position, indeed, he was perfectly in agreement with the older Stoics, who regarded actions themselves as indifferent, while the law of the universe

<sup>113</sup> Galen. *ib.* iv. p. 152; v. p. 168 sq.

<sup>114</sup> Diog. Laert. vii. 128.

<sup>115</sup> Cic. *de Off.* i. 45.

was exalted above all. In the times wherein the Stoical school thus sought to maintain consideration and respect by approximating more and more to the older Socratical schools, the New, or Last Academy, was, next to the Porch, the highest in repute. Even Philo of Larissa, a disciple of Clitomachus, who in the Mithridatic war passed from Athens to Rome, where among others Cicero attended his lectures on rhetoric and philosophy,<sup>116</sup> appears already to have deviated considerably from Carneades, and, on this account, has been often regarded as the founder of a fourth academy. Of the nature and value of his doctrines, however, we possess no certain information. Nevertheless, a general insight into its nature is afforded by the assertion that he denied that there was any difference of opinion between the Old and New Academy,<sup>117</sup> if we may assume that he had rightly seized the true import of the doctrines of the Old Academy. At all events the statement that he held the truth of things in this nature to be knowable, (denying, however, the validity of the Stoical criteria,)<sup>118</sup> favours the conclusion that, in the spirit of Plato, he admitted a supra-sensuous cognition of things to be possible. Whether he believed that he had discovered this cannot be expressly asserted. For although he compared philosophy to the medical art, and required of it not only that it should free the mind

<sup>116</sup> Stob. Ecl. ii. p. 38; Cic. Brut. 89; Tusc. ii. 3.

<sup>117</sup> Cic. Ac. i. 4.

<sup>118</sup> Sext. Pyrrh. Hyp. i. 235. οἱ δὲ περὶ Φίλωνά φασι, ὅσον μὲν ἐπὶ τῷ Στωικῷ κριτηρίῳ, τουτίστι τῇ καταληπτικῇ φαντασίᾳ, ἀκατάληπτα εἶναι τὰ πράγματα· ὅσον δὲ ἐπὶ τῇ φύσει τῶν πραγμάτων αὐτῶν καταληπτὰ. Cic. Ac. ii. 6.

from error and impel it to the investigation of truth, but that also it should teach man wherein true happiness consists, and furnish him with rules for the conduct of life;<sup>119</sup> yet, on the other hand, he adhered, we are told, to the position of the Academy, that it is impossible to distinguish a true or false idea;<sup>120</sup> and he expressed a wish that he might but meet with controversialists capable of refuting his own doubts.<sup>121</sup> It would seem, therefore, that with Carneades he was content with a certain probability, but that he longed more ardently for certainty, for which he looked to the operations of the intellect rather than to the sensuous impressions.

Still more removed from the sceptical tendency of the New Academy was Philo's scholar Antiochus of Ascalon, who is usually called the founder of the fifth Academy, and taught at Athens, and probably also at Alexandria and Rome, where he enjoyed the friendship of Cicero and many other distinguished individuals.<sup>122</sup> In his youth he adopted the sceptical manner of Philo, and laboured to refute the Stoics, but when in later life he had gathered a school around him, Antiochus sought to reconcile the Old Academy with the Peripatetics and Stoics, in such a manner, indeed, that we must perhaps look to the Stoical philosophy for the basis of his doctrine.<sup>123</sup> Accordingly, it has been said of him, that he introduced the Porch into the Academy;

<sup>119</sup> Stob. Ecl. ii. p. 38 sq.

<sup>120</sup> Cic. Ac. ii. 34.

<sup>121</sup> Numen. ap. Eus. Pr. Ev. xiv. 9.

<sup>122</sup> Ælian. V. H. xii. 25; Sext. Emp. Pyrrh. Hyp. i. 235; Plut. v. Cic. 4; Cic. Ac. ii. 4, 35.

<sup>123</sup> Cic. Ac. i. 4; ii. 19, 21, 22. He is said to have been a disciple of the Stoic Mnesarchus. Numen. ap. Euseb. Pr. Ev. xiv. 9; Cf. Cic. Ac. ii. 22.

may more, that he was a true Stoic,<sup>124</sup> and the Stoics objected to him; with the exception of a new phraseology he in reality taught the principles of the earlier Stoics.<sup>125</sup> He laboured to prove the agreement of the chief schools of antiquity, principally in ethics, which he regarded as the most important object of philosophy; dialectics being but an instrument or mean,<sup>126</sup> while physics occupied but little of his attention.<sup>127</sup> His controversy was, accordingly, directly against the New Academy. The philosopher, he maintained, must know whence he sets out, and whither he would proceed; but now, the New Academy must admit that they can know nothing;<sup>128</sup> and when they pretend that they are false ideas which cannot be distinguished from true ones, they contradict themselves, since therein such false ideas are recognised by them as such actually.<sup>129</sup> He therefore assented to the Stoics in making the sensuous impression to be the criterion of truth.<sup>130</sup> Even in Ethics he followed them very much, and there are only a few very unimportant points on which he believed it necessary to disagree with them. Thus he looked upon it as a mere extravagance when they taught that all transgressions of law are equal, or that the happiness of life consists in virtue alone; for he was of opinion that the sage

<sup>124</sup> Ib. 43; Sext. Emp. Pyrrh. Hyp. i. 235.

<sup>125</sup> Cic. de Fin. v. 25; de Nat. D. i. 7.

<sup>126</sup> Cic. Ac. ii. 9. Etenim duo esse hæc maxima in philosophia, judicium veri et finem bonorum, nec sapientem posse esse, qui aut cognoscendi esse initium ignoret, aut extremum expetendi, ut aut unde proficiatur aut quo perveniendum sit, nesciat.

<sup>127</sup> Yet a work of his, *περί θεῶν*, is mentioned. Plut. v. Lucull. 28.

<sup>128</sup> Cic. l. l.

<sup>129</sup> Ib. ii. 34; cf. ib. 14.

<sup>130</sup> Ib. 21, 22.



may be happy without external and bodily advantages, but that perfect happiness requires such outward accession.<sup>131</sup> These instances are enough to show how in this way of superficial inquiry, philosophy held it to be permissible to reduce all ultimate consequences back to a certain limited mean, without altering principles, and to show how gross was the prevailing ignorance as to the essential differences of the several directions of philosophical thought.

Thus did the newest Academy gradually decline, and by a semi-eclecticism make, as it were, its peace with the Porch. The fruits which the opinions of a Philo and an Antiochus, in common with the parallel tendency of a Panætius and a Posidonius, produced for the philosophy of a subsequent age, consisted principally in this, that they led philosophy back again to the study of the works of Plato and Aristotle, which had for a long time been pushed into the background, and neglected. Alongside of the Porch and the Academy, the Epicurean school still dragged out its existence, which had ever been deficient in scientific energy, and a few Aristotelians also were still to be found. The latter, however, were without importance and scientific influence. Like the other schools, they applied themselves chiefly to ethical questions, which the influence of the Roman character, which demanded a philosophy of life, had now rendered the paramount subject of inquiry. The Peripatetics of this age are generally censured as deficient in acuteness and dialectical skill.<sup>132</sup> Their names are, for the most

<sup>131</sup> Ib. 43.

<sup>132</sup> Cic. de Fin. iii. 12.

part, undistinguished; and it is scarcely necessary to say more of them than that they had even in the time of Cicero commenced their learned examination of the works of Aristotle; for to this date belong the grammarians, Tyrannio and Andronicus of Rhodes, who presided over the Peripatetic schools, and whose labours on the works of Aristotle have already been mentioned. Thus, then, all the philosophical schools of this period are characterised by an erudite notice of the earlier philosophy, which they regarded as the source and standard of the new. Such labours must have had their origin partly in a feeling of weakness, partly in the desire of imparting all the treasures of ancient literature to the Romans, and others who sought to acquire a knowledge of Greek philosophy. This duty, and the transmission of certain standing maxims, appear from this time the sole occupation of the philosophical schools, which now fell into obscurity, without, however, losing all influence, and which had their seats not only at Athens but wherever the civilisation and learning of Greece were spread. In short, we are now at the close of that philosophical development which began with Socrates, and the schools to which he immediately gave rise. This close announces itself as much in the scepticism of the New Academy and its eclectic confusion, both of which were favourable to a rhetorical handling of philosophy, as in the learned investigations which now came into vogue, into the philosophical merits of earlier ages.

We shall now attempt to give a rapid survey of the course of the philosophical development of this

age. In the first place, we see in Socrates, as if it were in the half-awakened consciousness of a youth, whatever was afterwards developed by a genuine and pure philosophy. What good services, and how, he will perform, all at once, see; but as yet he can scarcely express himself; so full, so agitated is his mind, that he cannot find the fitting form with which to invest that which he is labouring to produce. This is the source of Socrates' hesitating manner of expression, and of his knowing that he does not know, and his belief of demoniacal and religious intimations, as also of his reveries and transports. But it is a youthful soul in an old man. He is conscious that he will never be able to effect the moral regeneration of the state, nor to establish the perfect form of science; accordingly, he looks around for helpers in the good work, and so forms his school. On the minds of the admiring youths who throng around him he imprints his own lofty ideas of science and of virtue. He shows that it is man's duty to pursue a knowledge of himself, and that man's proper essence is to be sought for in the divine reason, which not only dwells within him, but also rules the whole world, in which, consequently, all is ordered according to reason, and has its design. He taught his disciples to determine the notions of things, and the essence which is presented in the notion, and practised them in the method, partly by carrying them back to the special and sensible, partly by seeking to determine the general form of the notion. With his whole soul he confides in science; where there is truly a rational insight, there is its rule undisputed. It is

only in ignorance, or involuntarily, that men commit evil. The body is but an instrument for the use and service of the ruling reason ; in and by itself it is utterly worthless. Virtue consists in nothing but the science of good ; it is therefore one, and teachable. Man, consequently, must emancipate himself from the wants of the body, and then he will possess true felicity. The destination of man is to approximate to the Deity, by freeing himself from all need, and by acting from a pure insight into good.

So vague and indeterminate a doctrine as the Socratic would naturally be exposed to much misconception. Yet even the imperfect Socratic schools do not wholly belie their origin. There are two points common to them all ; a low estimate of human knowledge, and a pursuit of mental freedom by means of the reason. Both have their ground in the ideal tendency which Socrates had imparted to philosophy. His ideal of science led to a perception of the deficiencies of the ordinary mode of human conception, and at the same time raised it to the pursuit of a rational intelligence, in which alone man's true dignity consists ; and thus were both points connected together, since science ought to regulate active life. Socrates was not to blame if Aristippus viewed the ideal to which his master had appealed in a purely personal light, and believed that man has nothing to guide him but the consciousness of the present, and consequently has nothing to aim at beyond keeping the present free from all disturbing causes, and so to enjoy it without check or hinderance. Even Antisthenes ap-

pears to have taken the ideal in an individual and personal sense ; his logical tendency is wholly negative ; he despises all such sciences as do not immediately bear upon moral life ; in physics, indeed, he appears to have aimed at a more general view, but the doctrine of the divine government of the world he perhaps understood wholly in an external sense, for the tendency of his ethical doctrine is to isolate the individual, and the independence of mind which he seeks to establish is of a purely negative character, being confined to the self-sufficiency of the sage, which rejects the enjoyment of external goods, but regards the enjoyment of personal powers as the greatest and highest good. The doctrine of the Megarians is of somewhat more lofty a character ; it acknowledged a supreme universal rationality, besides which nothing exists, which is the one only virtue free from all sensuous excitements, and is the reason not of a person but of the universe. But, on the other hand, the Megarians were unable to combine this universal reason with the special and personal consciousness, and in consequence became involved in inexplicable opposition to all human notions, and laboured greatly, but in vain, to overthrow the ground on which itself was standing. But all these different views were far from developing the Socratic consciousness of the science and life of man. And they but serve to show that the Socratic doctrine was devoid of the supra-human power of raising all those whom it had charmed, to the height of that consciousness from which it sought to form and develop science. They are the remains of an older

time, lower grades of developments, by which these imperfect Socratic schools were actuated, and whose influence, at a later period, became paramount, when the living force of the scientific mind again declined. The true development of the Socratic idea of science was carried out by Plato.

In a review of the progress of science in the history of Socratic schools, it is manifest that we have only need to notice the chief forms of philosophy, i. e. Plato, Aristotle, and the Stoics; since the other schools and philosophers may be regarded either as passing phenomena or as of a purely negative character, and indicating nothing more than the prevailing defects in the scientific ideas and exposition of their age, and affording those gaps and weak points to which an opposite and evil tendency easily attached itself. Still, even in these leading forms, we have to do not more with a purely advancing than with a retroceding motion. But every step backwards indicates merely that in the real basis of the progress there is some uncertain, untenable element, which, as relating to science, is an error. When we review the whole series of the Socratic schools, we must attribute their weakness to the view that the world in which we live, and with which our existence in all its springs and impulses is bound up, is not designed for a true and final perfection. This view was no invention of philosophy; it had its ground in the very character of antiquity, which knew not of, and could not hope for, any absolute from all evil. The philosophers, indeed, avoided to admit this view clearly, and in all its bearings, and thereby furnished adequate proof that

the scientific evolution of their ideas led them to adopt the other. But it lies at the background of their view of the world, and by it principally were they prevented from giving a stable basis, and a complete and perfect consistency, to their investigations. And we must even regard it as an advance in the development of their doctrines, that this view is gradually presented in a more precise and definite form, since it was only thereby that it could become an object of distinct knowledge.

In the same degree that the philosophical doctrine was influenced by this mixture of truth with error, and that the general form of science was less fixedly established, the developments of philosophy were naturally dependent on the peculiar sentiments or mental character of an individual or an age. This is strikingly manifest in the history of the Socratical schools. The chief of these are aptly represented by the different periods of the life of man. The bold, occasionally phantastical flights of Plato bespeak a character of youth ; he lives in the future rather than in the present ; he is full of good hopes, both for science and humanity ; still he cannot altogether admit the hope that the mind of philosophy shall ever emancipate himself from matter, notwithstanding that he does not consider it impossible gradually to get free from the force of necessity. More sober is the manly mind of Aristotle : he applies himself to the actuality of the present, wherein he finds many checks and hindrances, while man's capacities and might are but small. Into the sublunary sphere the force of reason just penetrates, and forms the energy of

science and virtue in man ; but the manifold influences of higher forces produce here the uncertain play of chance, and nothing has a permanent state ; experience is limited, happiness incomplete, dependent upon external conditions, and uncertain. However far from beautiful the reality of sublunary things may be, still man must adapt himself to them, and he will find them not only estimable but worth living for. Lastly, with almost the moroseness of the septuagenarian, who feels himself out of his place in life, with almost a bitter misanthropy, comes, in the last place, the Stoic. He appears as the admirer of the past, and despiser of his contemporaries. He insists upon a stern morality ; he demands the supremacy and absoluteness of the reason, but seemingly with little other view than despairingly to contrast with its high requirements the attainments of reality. What is human science but a mere general and lifeless type of the living reality ? Men are fools, far removed from that true wisdom which shall teach man the course of nature, and that eternal and wise law which pervades the whole world, and thereby is destined to conduct man to a rational consciousness of his proper destination, and to a virtuous life.

It is well to remark how the philosophical view of all these individuals is mixed up with this sentiment. Plato, animated by a soaring boldness, directs his view to the highest object, and to futurity, wherein it is ultimately to be reached. The Present satisfies him not ; he cherishes a fond hope of a better existence. Setting out from the position of human investigation, in which alone he hopes at



some time to realise the Socratic ideal, he maintained that every soul is in itself an absolute unity, and as such, though in a state of becoming, yet endowed with an eternal vitality. In the same manner as Socrates, he sought to arrive at science by determining the notion which expresses the essence. Accordingly, it was a problem for him to combine the particular with the universal. The multitude of unities, he clearly saw, must have its ground in some higher unity; and lastly, in order that it may be conceivable, there must be a non-hypothetical unity, which is the source of unity to all other natures, and so he arrived at the idea of God. God, the absolutely good and perfect, he acknowledged must be an unchangeable essence. This result gave a somewhat different form to his problem. It now became his object not merely to reconcile the universal and the special, but also unity with multiplicity, and essence with becoming. Starting from the position of humanity this was beyond his power. For he acknowledged that, as philosophers, we at best but strive after knowledge, passing from ignorance, through correct opinion, to a knowledge of truth. He saw that thought, in a state of becoming, is incapable of conceiving of God, who is above both science and entity, fully, clearly, and in his perfect unity. Still he did not, therefore, fail to perceive that man, when proceeding to science, has part in science and the eternal. It was in this direction of thought that he arrived at his theory of ideas. It was intended to furnish the mean between the special and the general—multiplicity and unity. For he proves that to deny

multiplicity and becoming is to render thought and language vain. He insists upon the necessity of art and order in language and thought, and shows that all ideas are, by their necessary form, linked together, and constitute a system, of which every member possesses truth, and shows that it is possible to ascend from the lowest notion of an indestructible number of souls up to the highest idea of God. The idea of God can only be conceived of in this multiplicity of ideas; and this, the only way of arriving at a knowledge of his nature, is by becoming cognisant of the notions which in his perfect truth he comprises, and therein of the essence of things. In this light it appears to be man's destination to attain to all permanent entity by means of becoming, and this view of things is diffused through the whole Platonic doctrine of nature and reason. The soul itself, so far as it is not an eternal idea and reason, exhibits itself, both in the universe and in special substances, as the mediating link between the corporeal—the indeterminate—the material—and the eternal measure of all—reason and goodness. The soul attaches itself, on the one hand, to the changeable want, and is desire; and, on the other, to the eternal, and is reason; but when combining both together it is the stirring spirit. Its root, its source, is in the world of ideas; there it originally contemplated the eternal essence of things; but joined to fleeting matter it remembers the ideas, though for this purpose sensation is necessary. Therefore the soul must exert itself to form these three elements of its being, desire to temperance, spirit to valour, and reason to wisdom; and to bring all into per-

fect harmony which is accomplished in justice, which virtue is intended to bind in unity, not merely individual souls within themselves, but all rational entities in the state, and indeed in the whole world. Now though Plato regarded it as the problem of philosophy, not merely to rise from multiplicity to unity, but also to descend from the latter to the former, we must confess that he was unable to resolve this problem. The multiplicity of ideas in the unity of God, is but a simple supposition, which he could not combine even with the view that God is a perfect unity, since he followed the opinion that every idea, simply as being special, and opposed with the universal, and as a part to the whole, cannot be looked upon as perfect. This he held to be the source of the world's imperfection; every idea has in itself indefinite non-being; it must be regarded as merely relative, and thereby it appears in the sensible combination of one with other. To Plato the sensible appeared an enigma; he might perhaps have conceived of it as a mean to a rational life, but he was unable to reconcile such a view with that other view, that it is an impediment, an evil; indeed, unable to derive its existence from the rational essence, he was disposed to look upon it as a necessary limit—the non-being, which indispensably attaches to the limitation of individual ideas, as they are posited in the world. Thus does he become indisposed to the sensuous presentation, and experience; he trusts to his indwelling force of reason, to find the truth without any external aids; and as it is impossible to think without sensible images, he pre-

fers the guidance of fancy to that of history and observation of reality. Such a course is perfectly in the spirit of youthful age; while it perfectly explains why his exposition is of so poetical and mythical a character.

But the course of nature, and the usual relations of human society, necessarily call man, sooner or later, back from the bold creations of his fancy to the soberness of reality. Happy is the man who, in the ripeness of manhood, is alive to the highest requirements of reason, and yet has learned to adjust himself to reality, in a full confidence that, in truth, there is perfect correspondence between them, however in appearance they may seem to differ. We are only not able to ascribe this felicity to Aristotle. It is true that he attends, more than Plato, to reality, for it is in the divine energy which shapes and gives fashion to it that he sees the ground of science and virtue. Accordingly, he strives, with all the industry of his powerful mind, to exhaust experience as completely as possible; for he felt that, in this gradually developing world, it is only from phenomena—the to us better known, that we can advance to the general—the known in itself—the unconditional truth. But, now, in this experience of natural and human things, Aristotle fell in with many exceptions to a rational law, monsters in nature, evils and disorders in human society, by which he felt himself constrained to admit that in nature all is not disposed according to rational law. He could not hope that the defects now experienced in the world will ever be remedied or disposed of. Accordingly, he was driven to assume,

alongside of the perfect First Cause, by which all is regulated according to a rational end, the existence of a necessity, which is the source of all imperfection in the world ; and of a matter as its ground, which, indeed, in itself, is nought, and yet is in the world from eternity as its indispensable condition. His ground-principle is, that as now it is, so was it ever and always will be. Matter has always been in the sensible world, and consequently also, what is inseparable from it, privation—the imperfection of things. Moreover, it is impossible to arrive at a more perfect state in this world, since the nature of matter requires becoming and motion ; hereby, while one form is produced, another is destroyed, and it never happens that any one exists perfectly in matter, for in that case no other new form could be produced. In short, this world is not designed for perfection ; nature, by which it is governed, works unconsciously in producing the good, and occasionally both misses and destroys the good. If, in this moveable world, aught is eternal, it must consist in a perpetual periodic revolution, and not in a steadily advancing progression. Even human virtue and felicity are not free from the fluctuations of destiny, nor independent of the force of nature ; it stands in need of outward assistance ; it does not exist in pure wisdom, but results from the impulses of nature, which, although man may temper them, he cannot wholly subdue or alter ; neither the happiness nor science of man is capable of attaining to undisturbed stability. Such a doctrine speaks clearly for itself, and all at once see how it labours to maintain and to

seize the ideal in its universality, without, however, sacrificing to it the special ; both of which, on this account, it sharply opposes to each other, as God and the world. God, as the pure self-thinking reason, is the object of pure science, the form of forms. It exists wholly for itself, free from all necessity ; in it lies the true essence of all mundane things, in which form is combined with necessary matter. Thus, then, the influence and essence of God himself is in the world, broken, however, and limited by the necessary imperfection of that which becomes. But even this sharp opposition of the material and formal principles, seems, agreeably to what has been previously observed, to constitute an advance of doctrine, when compared with the vague opinion of Plato on the subject. Yet this advance is not unattended with evil. According to the view of Aristotle, no pure form, no universal principle, can exist without matter. Still the special appears in no other light than as the condition of the universal ; and even though Aristotle may deny the reality of general notions, still his general theory insists upon the truth of the general rather than that of the special. The individual is, according to Aristotle, only special in consequence of the universal form expressing itself in some matter, as the condition of its mundane existence ; the individual is only for the preservation of its genus ; even the rational soul, in whose scientific and virtuous energy, design and divine form are most distinctly revealed, is only special in so far as it has its existence as the form of a determinate material body, on which account also it is perishable

and mortal. Thus, too, everything in this world is fleeting and transitory. But it would be as vain as it is foolish to lament over all these defects of our mundane, and especially of our earthly life ; we must take life such as it is ; and in earnest activity, which to the virtuous is pleasure, enjoy life to the utmost in a rational intercourse with others.

This is, indeed, a sad position of things—alike removed from hope and despair ; man must confess that it is not easy to take things as they are, without looking for something better. This position, accordingly, cannot be long maintained, and men turn from it either to hope or to despair. But the direction which the cold, doubting, experimental mind of Aristotle had given to philosophy ;—and yet more, the prevailing tendency of the age, produced by the political decay and moral corruption of all the Grecian states, allowed not a good hope to spring up again. The hope of Epicurus looked not beyond a sensual enjoyment. It may be taken as the expression of the calculating selfishness of a little mind, which despised all pursuit of a true science and true good ; with him the universal is nothing ; he trusts the senses alone ; in physics he adopts a low view of the pre-Socratic philosophy, in order by a sceptical levity, to master the fears which attend his foolish hopes. Compared with such meanness, not so much of science as of sentiment, the despair of the Sceptics appears noble and praiseworthy. But even here there is doubt and indecision. They fear to trust the intellect, whilst their obscurely philosophical instinct refuses to do homage to sensation, and they are unable to discover

any middle course between the two, and consequently they fluctuate between sense and reason. In obedience to his philosophical impulse, the Sceptic looks for a perfect equanimity, to attain which he is ready to deny himself everything ; but as a man, he believes that it is impossible to live without yielding to his sensuous impulses, and he concedes to the reason no other influence over his conduct than perhaps the moderation of his passions.

But man cannot live abandoned to despair ; the Greeks who had passed through the schools of Plato and Aristotle, could not contentedly resign themselves to the meagre hopes which an Epicurus held out to them. The Stoics, although they could not purely confide, with Aristotle, in the energy of life, nor, with Plato, struggle with a bold confidence, maintained the dignity of reason, and the ideal in nature, although for themselves they had but little hope. The science of the Stoics is a clear expression of the doubt to which man becomes subject, as soon as he feels himself constrained to acknowledge the supreme demands of reason, but at the same time feels too strongly the insufficiency of himself and of man's present strength to satisfy those high requisitions. They desire science ; they acknowledge that true science consists in the experience of the rational law, which rules the universe ; they are of opinion that this science must be possible in the world ; and that even man can attain to it, since he participates in the rational force, by emanation from the universe, whence he derives the ruling unity of his soul. They require virtue



of man, who in the possession of this science must live agreeably to rational law. But still are they not themselves far removed from this virtue, and this science? They find themselves vassals to the senses, besides which they believe in no force or power; their highest idea of perfection is a full and free development of the sensuous powers, the sensuous life; reason, which ought to rule the world, and which the sage ought to possess, is consequently, in their view, nothing else than the highest degree to which the senses can be improved. All is material, all is corporeal; everything has in itself, besides reason, the necessity of becoming. In this manner, the Stoics did, it is true, place at the head of their doctrine, a unity which comprises all things, and, at the same time, is constrained to dissolve itself into multiplicity, and to submit to the changes of imperfect life, in order to preserve its life in flux. Setting out from the consideration of the special and the sensible, the Stoics were averse to recognise the validity of general notions; still they were forced to make the authority of the universal extend over all, and as this, however, was only a sensuous universal, its energy, in reality, ultimately absorbs into itself again all that is special or personal, and exhibits itself merely as a transient phenomenon of the universal life. Every one is fixed, by the universal necessity, in his appointed place; and it is only when it follows its proper nature, that it is free; to understand and to submit to this nature is the wisdom and the virtue of the individual. This universal, life-giving energy, is, properly, the only

true and individual force of life, and has only so far truth as it has for awhile preserved its participation in the universal life. Hence every individual action is, in itself, indifferent, and is only of importance so far as it is an expression of the universal force. In this manner, the ideal was not altogether thrown aside by the Stoics; still it only appears as the universal basis of all living activities; these themselves, and all individual forces, are but so many necessary consequences, pure creations of the ideal life, in struggle with its own necessity; and, consequently, they were naturally treated of by the Stoics as of little importance. The advancement of philosophy by the Stoical doctrine consists chiefly in this, that not attempting to conceal the discord between the necessary imperfection of the world and its perfect ground, they determined to transmute the necessity into the perfect essence itself. It may truly be said, that thereby they gave the purest possible expression of that view of the universe which prevailed, for the most part, in the minds of the ancient Greeks, whereas Plato and Aristotle were strongly sensible of the limits and defects of such a view, without being able to break through and to master them.

The clearer the consciousness of the narrowness of any view is, the less possible is it to maintain it. But in order that we may be more clearly convinced of the intimate dependence of human science upon the conditions of man's outward life, and his general sentiments, it is expedient to observe how the doctrine of the Porch was cast into the shade by a cast of thought greatly inferior to it in scien-

tific value. The superficial doubts, the rhetorical manner of the New Academy, its sensuous doctrine of probability, quickly gained respect and diffusion; even men who had been educated in the Porch, abandoned the rigorous form of its system for a loose eclecticism. Hereupon, the still lingering, inventive energy of philosophy died wholly away. Men abandoned themselves to custom and prescription, both in thought and action, and believed that they must yield to the authority of the older philosophical doctrines.

Nevertheless, the results of this period of speculation were not without fruit for following times; so far from it, indeed, that almost all succeeding centuries have been instructed by its inquiries, and, for the most part, have wearied themselves out in the attempt to understand them fully. Their strength lies chiefly in the strict and accurate form of science, within which they all move. The common aim of all is to find a science which may actually exhaust its object: even the Stoics were led by such an aim to the perception that a universal rational law expresses itself in all mundane things. But it was the form of the notion, which all alike made the principle of science; and this form, according to them, exhibits the essence of a thing. This form led them to recognise both the universal and the special, unity and multiplicity in their necessary connection with each other; and while they sought to realise science in philosophy, they found themselves constrained to recognise, alongside of that permanent and enduring essence which is expressed by the notion, the power of becoming

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both in man and nature. Accordingly, the organic unity of their doctrine is formed of three parts, Logic, Physics, and Ethics. But with these general and abiding features of their doctrine, we meet with certain moveable elements of the same, which lead to a more diversified consideration of the objects of science. These variations concern the relations of the general to the special, of unity to multiplicity, and of the permanent essence to changeable life. In this respect it is particularly instructive to observe how the variable tendency of their doctrine naturally formed itself in opposite directions. Plato, for instance, alongside of that world of ideas which he extols, and hopes to be able to know by a pure activity of reason, leaves the sensible world to co-exist as the natural and attendant shadow of the truth; still, while he regarded the universal Idea, in its unity and multiplicity, as the element in the becoming, which is true, he strongly maintains the value of individual essence against the overwhelming claims of the universal; the individual is not, with him, a merely transitory shape, into which the universal enters for a while; it is a peculiar reason, endued with a proper activity, an end of itself, and of eternal import. Aristotle, on the other hand, directing his view to mundane things, contends, as against a dangerous error, against the doctrine that there is any eternal essence of the ideas; all, except God, exists only in matter, and is merely a special and individual essence; and consequently teaches that the knowledge of all things must be derived from its appearance by means of experience. To such a

course he was led by his wish to get rid of, or at least to give real form to that shadowy entity in which all sensuous becoming and experience had appeared to Plato. Aristotle sought to show how, in motion, energy is evolved, how the form and the rational end is realised in matter. But as this can only be done imperfectly, and in opposition to privation, the eternal import of the individual was gradually lost; it became the mere support, for a time, of the universal form; it is undoubtedly the only essence in the world, but still not an end in itself, but it subserves merely to the general form which it is destined continually to renew. Even in the human soul it is only a limited and transitory appearance of truth; reason does not dwell in the soul, of its proper nature; the human soul is merely a dwelling into which reason enters for a short time. Thus the individual, because it is formed simply out of matter, appears simply as a passive and fragile vessel of the beautiful and good, which, however imperfectly, are still ever forming themselves in matter, and the contrariety between the formative force of God and matter was evolved by Aristotle more distinctly than by any philosopher before him. This contrariety the Stoics attempted again to get rid of, under a strong sense of the necessity of assuming one single object of science, and a single ground of all things. Accordingly, they blended together, in their idea of the living force of God, the universal form with the special matter, the ground of unity with that of multiplicity, the eternal good with the necessity of becoming. But the more constrained this blending was, the

more violently would the elements, so forcibly conjoined, be opposed to each other. It was only by a forced conclusion that the unity of sensuous perception with reason and science could be maintained, as well as the assertion that the sensuous desires are merely a perversion and corruption of the rational will. But multiplicity and becoming refused to be so constrained; and as they would not fully adjust themselves to the unity and the eternal essence, they were explained to be the special productions of certain periodic states of the one universal living essence, which, in spite of the fluctuations of these states, continue ever one and the same. According to this then, the special, the multiple, and the becoming, coexist with the general, the one and the permanent essence; but the former are still nothing but phenomena, mere manifestations of the latter, which is the true, and that which is presented in science, but still, even as such, incapable of maintaining its vital energy, otherwise than in life and becoming. There is in all these variations of view, an undeniable progress, still this progress pursues a different direction in all these several philosophers. While Plato posited the pure intellect as the source of all science, and was led thereby to regard the essence as general, and becoming as a mere relation, in which there is neither truth nor reality, it might have been supposed that he would ultimately deny all individuality, and the multiplicity of ideas; but the force of truth, in opposition to the tendency of his view to admit the eternal essence of individual things, and to investigate truth in the multiplicity of ideas.

Aristotle pursued an opposite direction; he connected the activity of the reason with sensation, and in the sensuous becoming he found the true energy, and every true essence is, to his mind, individual. Now if we were to ascribe to Aristotle a steady advance in this direction, we should expect that he would have pushed unity and the general further into the background than Plato had. The contrary, however, is the fact; the multiplicity of genera he does, it is true, posit as something existent in, and eradicable from the sensible world; still they have their ground only in matter, in the motion of imperfect entity, and it is only the general unity of individual essences that, according to Aristotle, is the eternally true. The Stoics pursued this direction to its utmost extent. According to them, all science rests on sensation, which advances step by step to the grade of reason; all essence is individual; becoming is the true life of the vital force. But the true end of such a direction would have been to depict the universal unity as mere semblance; the Stoics, however, were forced to yield to the power which the form of science exercised over them, and they were constrained to admit the universal permanent unity, even almost to the exclusion of the multiple, the special, and the contingent; at least they appear to have regarded the latter as wholly subordinate to the former. It cannot be denied that all these philosophers felt themselves constrained by the scientific form which they laboured to establish by their investigations, to recognise certain contrarieties around which all their speculations revolved, but

were unable to settle a permanent relation between them. And this was only natural, for from the point of view at which Antiquity was standing, it was impossible to perceive that this world is destined to a true perfection in its perfect principle.

END OF VOL. III.



